

## ON AUSTRALIAN ANOBIIDES (COLEOPTERA).

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*(Contribution from the South Australian Museum.)*

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The species of the subfamily Anobiides of the Ptinidae, although including some important ones from an economic point of view, are nearly all small and dingy, and specimens of the sections Xyletininae and Dorcatominae are difficult to manipulate, so that parts of the under surface may be clearly seen, yet these must be examined before the genera can be noted with certainty. Very few Australian species of the subfamily have been previously named. The generic details given by Lacordaire<sup>(1)</sup> appear of little use, as he seldom mentioned parts of the under surface, in particular of the head and sterna, by which the Australian genera may be most satisfactorily distinguished; so for the main divisions reliance has been placed on Leconte and Horn.<sup>(2)</sup> That many of our genera occur in other parts of the world is certain, apart from introduced ones, so that some notes on generic features may be useful; the generic table, however, was prepared solely with a view to convenience of identification. Recently<sup>(3)</sup> a list was given of the species of the Ptinides, and it seems now desirable to give one of the Anobiides, based on M. Pic's catalogue of the subfamily.<sup>(4)</sup>

## DRYOPHILINAE.

DRYOPHILODES AUSTRALIS, Blackb.

DRYOPHILUS<sup>(5)</sup>

,, INSIGNIS, Blackb.

## ERNOBIINAE.

ERNOBIUS MOLLIS, Linn.<sup>(6)</sup>

## ANOBIINAE.

SITODREPA PANICEA, Linn.

TRYPOPITYS

ANOBIUM PUNCTATUM, De Geer.

PRONUS MAGNIVENTRIS, Lea

*domesticum*, Fourc.

,, MEDIANUS, Lea

HADROBREGMUS AUSTRALIENSIS, Pic.

PTILININAE.<sup>(7)</sup>

## XYLETININAE.

LASIODERMA SERRICORNE, Fab.

## DORCATOMINAE.

CALYMMADERUS AUSTRALIENSIS, Pic.

DORCATOMA LANIGERA, Oll.<sup>(9)</sup>THAPTOR<sup>(8)</sup>

CAENOCARA

(1) Lacordaire, Gen. des Col., iv.

(2) Leconte and Horn, Class. Col. N. Am., 1883, in Smithsonian Misc. Col., No. 507.

(3) Lea, Trans. Roy. Soc. S. Austr., 1917, pp. 146, 147.

(4) Pic, in Junk's Col. Cat., part 48, Berlin, 1912.

(5) Olliff, Proc. Linn. Soc. N.S. Wales, 1888, p. 1512, records this genus as Australian, but without naming a species.

(6) Recorded as cosmopolitan, but specific Australian localities are herein noted.

(7) A new genus of the section herein noted (*Deroptilinus*).(8) Recorded by Pic as a synonym of *Calymmaderus*.(9) Olliff, l.c., p. 1511, overlooked by Pic; but herein proposed as the type of a new genus, *Aulacanobium*.

## AUSTRALIAN GENERA OF ANOBIIDES.

- A. Head free, front coxae level with intercoxal process.  
 a. Antennae simple .. .. . *Dryophilodes*  
 aa. Antennae with three apical joints greatly enlarged .. .. . *Ernobius*
- AA. Head with sides capable of being received in prosternal excavations, front coxae strongly projecting.  
 B. Antennae with four joints ramose .. .. . *Deroptilinus*  
 BB. Antennae with three apical joints not greatly enlarged (the apical one at most moderately enlarged).  
 b. Mesosternum with an open cavity, continued on to metasternum, for reception of antennae .. .. . *Trypophytus*  
 bb. Mesosternum not cavernous.  
 c. Base of lower surface of head deeply bisinuate for reception of antennae .. .. . *Lasioderma*  
 cc. Base not bisinuate or cavernous.  
 d. With regular series of punctures on elytra .. .. . *Tasmanobium*  
 dd. Without such .. .. . *Secretipes*
- BBB. Antennae with three apical joints much longer, and usually much wider, than the preceding ones.  
 C. Base of lower surface of head deeply bisinuate for reception of antennae.  
 e. Two basal joints of club each with a long ramus .. .. . *Aulacnobium*  
 ce. Club not ramose.  
 f. Each side of prosternum with an exposed triangle .. .. . *Dicoeloccephalus*  
 ff. Legs concealing sides of prosternum .. .. . *Deltocryptus*
- CC. Base of lower surface of head not deeply bisinuate.  
 D. Without a concealed sternal cavity.  
 g. Mesosternum and metasternum with an open median cavity, common to both .. .. . *Anobium*  
 gg. Sterna without an open median cavity.  
 h. Rear flanks of prosternum oblique .. .. . *Sitodrepa*  
 hh. Rear flanks vertical .. .. . *Pronus*
- DD. Front and middle coxae separated to allow passage of antennae into a concealed sternal cavity.  
 E. First joint of club longer than two following combined .. .. . *Calymmadcrus*  
 EE. First joint shorter.  
 F. First joint of club of male with a process more than twice as long as its support .. .. . *Caenocara*  
 FF. Process not twice as long as its support .. .. . *Dorcatoma*

## NOTES ON TABLE.

aa. *Dryophilus* is allied to *Ernobius*, but I have not seen any Australian species, although Olliff records the genus as occurring in New South Wales.

AA. The head is usually seen resting on the breast, concealing part or all of the front legs.

*Hadrobregmus* has been recorded as Australian, but *H. australiensis* is an *Anobium*.

## DRYOPHILODES.

The numerous small and dingy species, which I refer to this genus, certainly all belong to the *Dryophilini*, but it is probable that they will eventually be referred to several genera when the species can be compared with associated ones occurring elsewhere, and particularly with the New Zealand genus *Sphinditeles*, and similar genera, but at least they may all be referred to *Dryophilodes* by the generic table given herein. Much importance in the group is sometimes attached to the sides of the prothorax, so that *D. sericornis* and *D. marginicollis*, whose prothoracic margins are conspicuously wider than on all others, are almost certain to be considered as belonging to a different genus, or to two different genera. In the event of the genus being split up, *D. subcylindricus*, *D. vigilans*, *D. angustus*, and *D. minor* should be kept together, and *D. politus* and *D. subopacus*, which are certainly close to *Sphinditeles*, should also be kept together. The prothorax of many species, as viewed from in front, appears to have the

sides evenly arcuate from the base to the middle, then evenly rounded to the apex, but when viewed from behind, or from directly above the scutellum, each side appears to be acutely produced in the middle, or even spinose; but the apparent acuteness varies so much with the point of view, and the gradations between the extremes of the genus are so gradual, that they cannot be employed for the major divisions of a table, although often useful for distinguishing some of the species. The hind angles are sometimes produced to the sides, when, if small, they are not easily seen, and so the prothorax may appear to have obtuse basal angles, sometimes they are produced slightly backwards, on to the elytra near the shoulders, on such specimens they usually appear decidedly acute, although they may be actually 90 degs. or more. On most species the hind angles are more densely clothed than the rest of the prothorax, frequently appearing whitish, but as the pubescence is easily abraded or disarranged not much reliance can be placed upon it; the density of the pubescence also makes an apparent difference, except on close examination, to the degrees of the angles and the arcuation of the sides. The lineate arrangement of the elytral punctures is conspicuous on some species, and faintly or not at all traceable on others, but, even when not traceable elsewhere, a faint lineate arrangement on the basal slope may appear or disappear from various points of view. I have not usually considered it necessary to describe more than the colour of the under surface, but the parts of all species were examined; the apical half of the metasternum has a deep median line, and, unless otherwise mentioned, the apical segment of the abdomen is either flat, or has a more or less shallow median impression; it may sometimes be used for distinguishing the sexes, but not commonly so. All the species have the head with small crowded punctures, often partially concealed by pubescence. The eyes are always prominent, but vary in size from small to moderately large. Many of the species may be beaten from eucalyptus foliage affected by various kinds of gall-insects.

#### TABLE OF SPECIES OF DRYOPHILODES.

- A. Elytral pubescence forming more or less conspicuous markings.
- a. Elytral pubescence mostly pale, with a large dark patch on suture.
    - b. Sutural patch as in fig. 1 .. .. . *insignis*
    - bb. Sutural patch as in fig. 2 .. .. . *pyrifer*
    - bbb. Sutural patch as in fig. 3 .. .. . *sagittifer*
  - aa. Elytral pubescence not as in a.
    - c. Pubescence in irregularly alternate golden and white vittae .. *pictus*
    - cc. Three transverse series of small spots .. .. . *latus*
- AA. Elytral pubescence uniform or almost so.
- B. Antennae conspicuously serrated .. .. . *serricornis*
  - BB. Antennae filiform, or at most feebly serrated.
  - C. Sides of prothorax distinctly arcuate towards base, hind angles acute.
    - d. Basal third of prothorax completely clothed with white pubescence .. .. . *basicollis*
    - dd. Base of prothorax without white pubescence, or only in angles.
    - e. Elytral pubescence longer than usual, and lineate in arrangement .. .. . *pilipennis*
    - ee. Elytral pubescence short and uniform.
    - f. Elytral punctures not distinctly seriate in arrangement on basal half.
    - g. Apical segment of abdomen conspicuously bifoveate .. *bifoveiventris*
    - gg. Abdomen not bifoveate.
    - h. Prothorax not at all black.
      - i. Sides of prothorax viewed directly from above conspicuously angulate in middle.
        - j. Size moderate .. .. . *squalidus* (in part)
        - jj. Size small .. .. . *orthodoxus*
      - ii. Sides of prothorax, so viewed, not angulate in middle .. .. . *metasternalis*

- hh.* Prothorax partly or entirely black.  
*k.* Without a finely impressed line at base of pronotum *murinus*  
*kk.* A finely impressed line at base of pronotum.  
*l.* All joints of antennae conspicuously longer than wide .. .. . *acuticollis*  
*ll.* Some of the median joints of antennae very little or not at all longer than wide.  
*m.* Size moderate .. .. . *squalidus* (in part)  
*mm.* Size minute .. .. . *parvoniger*
- ff.* Elytral punctures, at least on basal half, more or less seriate in arrangement.  
*n.* Prothorax black.  
*o.* Bases of prothorax and of elytra of two contrasted shades of colour .. .. . *brunneipennis*  
*oo.* Bases similarly coloured.  
*p.* Length less than 3 mm. .. .. . *apicipennis*  
*pp.* Length 3 mm. or more.  
*q.* Elytra more than thrice the length of prothorax *eucalypti*  
*qq.* Elytra not thrice the length of prothorax .. .. . *acutangulus*
- nn.* Prothorax at most dark brown.  
*r.* Each elytron at base wider than median length of prothorax .. .. . *brevicollis*  
*rr.* Each elytron narrower than median length of prothorax.  
*s.* Seriate punctures of elytra not distinct to middle .. *subhumeralis*  
*ss.* Seriate punctures distinct to beyond middle.  
*t.* Sides of prothorax, as viewed obliquely from behind, apparently spinose.  
*u.* Interstices on basal half of elytra asperate-punctate or granulate .. .. . *rufobrunneus*  
*uu.* Interstices there smoother .. .. . *seriatus*  
*ll.* Sides of prothorax, viewed as in *t*, not apparently spinose.  
*v.* Elytra quite parallel-sided from behind shoulders to near apex.  
*w.* Elytral pubescence extremely short (dust-like) *pulverulentus*  
*ww.* Elytral pubescence short but not abnormally so.  
*x.* Interstices between rows of punctures with a granulated appearance .. .. . *interstitialis*  
*xx.* Interstices without a granulated appearance *flavipalpis*  
*vv.* Elytra with slightly rounded sides .. .. . *melanostethus*
- CC.* Sides of prothorax scarcely or not at all arcuate towards base, hind angles 90 degs. or more.  
*D.* Elytral punctures not distinctly lineate in arrangement.  
*y.* Thin .. .. . *subcylindricus*  
*yy.* Comparatively robust.  
*z.* Greatest width of prothorax slightly more than that of elytra .. .. . *fumosus*  
*zz.* Greatest width of prothorax not more than that of elytra  
*a.* Derm of elytra not black .. .. . *robustus*  
*aa.* Derm of elytra black, except on part of apical slope.  
*b.* Pubescence short and depressed .. .. . *niger*  
*bb.* Pubescence longer and looser .. .. . *pullatus*
- DD.* Elytral punctures more or less distinctly lineate in arrangement.  
*E.* Comparatively robust.  
*c.* Pubescence white or almost so, and very dense .. .. *albatus*  
*cc.* Pubescence darker and less dense.  
*d.* With two shallow medio-basal depressions on pronotum *multiseriatus*  
*dd.* Without such.  
*e.* Derm of prothorax and elytra of two contrasted shades of colour.  
*f.* Elytra scarcely twice as long as wide .. .. . *latipennis*  
*ff.* Elytra more than twice as long as wide .. .. . *brevicornis*  
*ec.* Derm of prothorax and elytra not of contrasted shades of colour.



g. Prothorax with conspicuous lateral margins ..	<i>marginicollis</i>
gg. Prothorax with feeble lateral margins.	
h. Prothorax with denser and paler clothing on hind angles than on disc .. .. .	<i>ubiquitosus</i>
hh. Prothorax without special clothing on hind angles.	
i. Prothorax black .. .. .	<i>obscuripennis</i>
ii. Prothorax not black.	
j. Size minute .. .. .	<i>abjectus</i>
jj. Size larger.	
k. Many joints of antennae scarcely longer than wide .. .. .	<i>australis</i> ?
kk. All joints except the second distinctly longer than wide .. .. .	<i>subapicalis</i>
EE. Comparatively thin.	
F. Prothorax entirely black.	
l. Seriate arrangement of elytral punctures feeble.	
m. Pubescence very short and depressed .. .. .	<i>vigilans</i>
mm. Pubescence longer and sloping .. .. .	<i>planicollis</i>
ll. Seriate arrangement of elytral punctures distinct.	
n. Greatest width of prothorax equal to base of elytra ..	<i>nigrinus</i>
nn. Greatest width of prothorax less than base of elytra.	
o. Upper surface shining .. .. .	<i>politus</i>
oo. Upper surface subopaque .. .. .	<i>subopacus</i>
FF. Prothorax at most partly black.	
G. Greatest width of prothorax equal to base of elytra.	
p. Pubescence very short and depressed .. .. .	<i>angustus</i>
pp. Pubescence with a looser appearance .. .. .	<i>minor</i>
GG. Greatest width of prothorax less than base of elytra.	
H. Prothorax from some directions with a distinct median line .. .. .	<i>cribripennis</i>
HH. Without such,	
I. Lineate arrangement of elytral punctures distinctly traceable to beyond the middle .. .. .	<i>parvicollis</i>
II. Lineate arrangement not traceable to middle; size much smaller .. .. .	<i>pallidus</i>

## NOTES ON TABLE.

aa. Specimens of these species, in good condition, are very distinct, but the pubescence appears to be easily disarranged or abraded.

C. The point of view should be from immediately above the scutellum; on these species the arcuation of the sides of the prothorax is distinct in itself, although sometimes apparently enhanced by clothing, the hind angles are also less than 90 degs. Seen from behind the sides appear angulate in middle. On the species of CC the clothing may sometimes cause the sides to appear arcuate, although they are really not so, and the angles are usually more than 90 degs. When the angles are greasy or dusty, however, it is sometimes difficult to decide as to their degrees; *D. parvoniger* at first glance appears to have the hind angles more than 90 degs., but on close examination they are seen to be acute, with the sides before them arcuate.

f. In some lights about the basal fourth of *D. squalidus* a faint lineate arrangement appears from certain directions, but on the species of ff the seriate arrangement is fairly distinct to the middle, or beyond it.

g. This character may be confined to the male, but the species is otherwise distinct..

i. On these species, as on many others of the genus, the sides of prothorax when viewed from directly above or behind the scutellum, appear to be quite strongly angulate in the middle, or even almost spinose, but on altering the point of view to a more frontal one this appearance is lost.

ii. All the specimens referred to *D. metasternalis* appear to belong to but one species, but on some of them a faintly lineate arrangement of the punctures

may be traced. The hind angles, viewed from above the scutellum, certainly appear slightly less than 90 degs., but the arcuation of the sides before the base is feeble.

q. There are other differences between *D. eucalypti* and *D. acutangulus*, particularly in the pronotum and length of antennae, but the comparative lengths of the prothorax and elytra are at once apparent when specimens of the two species are placed side by side.

r. This is a comparatively robust species, but to appreciate the character used to distinguish it from those of *rr*, it is necessary to hold specimens at such a point that the front edge of the prothorax is clearly visible.

s. It was with some doubts that this species was placed with others of *ff*, as the seriate punctures are but feebly defined even near the base. The specimens, however, have a dark or velvety patch on each side behind the shoulder, that is fairly distinct from some directions, although it is not due to pubescence.

t. On these species the sides of the prothorax, from an angle of about 45 degs. behind the scutellum, appear to be very sharp, even spinose; on those of *tt*, from the same point of view, the sides appear to be moderately produced, but certainly not spinose.

z. *D. fumosus* was somewhat doubtfully placed here; see notes under its description.

DD. The lincate arrangement of the elytral punctures is usually sufficiently distinct on the basal half, but on many species it becomes vague posteriorly, and on a few it is not very sharp even towards the base, although a lineate arrangement is certainly traceable in parts.

ee. This may only refer to the base of the elytra, which is as dark as the prothorax.

GG. The two species here associated are sufficiently distinct when placed side by side, but it is rather difficult to define the differences except in length and clothing; there are eight of *D. minor* before me, all taken together, on some of them the prothorax is black with only the front edge obscurely reddish, so that they might have been referred to *F*, where they would be associated with *D. vigilans*, a much larger and otherwise different species.

#### DRYOPHILODES AUSTRALIS, Blackb.

A Victorian specimen, measuring 3 mm., was standing in the Blackburn collection as *D. australis*, although without a name-label actually transfixed by its pin. It differs from the description in being of an uniform dull castaneous-brown (not piceous with some parts paler), and with fairly large and close-set rows of punctures, distinct to well beyond the middle (on the sides almost to the apex); the elytra were described as "*obsoletissime striatis*," and those of the specimen in question might fairly be so regarded in comparison with other beetles, but for the genus the rows are unusually distinct. The specimen has been included in the table as *australis*?, as its identity is certainly doubtful.

#### DRYOPHILODES INSIGNIS, Blackb. Fig. 1.

One of the few strikingly marked species of the subfamily. It varies somewhat in size, and is widely distributed, specimens before me being from northern Queensland, New South Wales (Wollongong, National Park, Forest Reefs), Victoria (Nelson), South Australia (Gawler, Mount Lofty, Port Lincoln), and Western Australia (Garden Island),

**Dryophilodes pyrifer**, n. sp. Fig 2.

Piceous-brown, abdomen and parts of legs obscurely reddish. Densely clothed with whitish scales, obscurely variegated on head and prothorax, elytra with a conspicuous somewhat pear-shaped velvety patch of darker scales, and with faint stripes, three median segments of abdomen each with a conspicuous apical fringe.

Head with large prominent eyes. Antennae with second joint rather small, third to tenth subequal in length but slightly diminishing in width, eleventh about half as long again as tenth. Prothorax not much wider than long, sides slightly arcuate towards base, hind angles somewhat acute, densely and finely granulate. Elytra distinctly wider than prothorax, parallel-sided to near apex; with regular rows of punctures, almost concealed by clothing. Length, 4 mm.

*Hab.*—Tasmania: Stanley, on top of "Nut" (A. M. Lea).

At first glance apparently belonging to *D. insignis*, but decidedly larger, prothorax longer in proportion, and velvety patch of elytra with a parallel-sided extension to about one-fourth from the base. The head of the type has not been abraded, but appears to be densely granulate or punctate; where the prothorax has been abraded it is seen to be closely covered with small granules.

**Dryophilodes sagittifer**, n. sp. Fig. 3.

Piceous-brown, abdomen, legs, and antennae more or less obscurely reddish. Densely clothed with white or whitish scales, on the upper surface variegated with fawn-coloured ones; the elytra, in addition, with a conspicuous velvety patch in middle.

Eyes rather large and prominent. Antennae moderately long. Prothorax not much wider than long, sides moderately rounded, gently arcuate towards base, hind angles almost square, derm concealed. Elytra rather narrow, distinctly wider than prothorax, parallel-sided to near apex; with rows of normally almost concealed punctures. Length, 2.75-3 mm.

*Hab.*—Queensland: Dalby (Mrs. F. H. Hobler); New South Wales: Sydney (A. M. Lea).

A beautiful little insect, allied to *D. insignis*, and the preceding species, but smaller, and with the velvety patch of different shape, being acutely produced in front and notched posteriorly, so as to be shaped somewhat like an arrow-head; it is also usually conspicuously bordered by snowy scales; beyond the velvety patch each elytron has white and fawn-coloured scales (varying in extent with the specimen), and with darker patches sublineately arranged, as if remnants of vittae. The derm of the head and prothorax is normally concealed, but is apparently covered with small punctures or granules. The hind angles of the prothorax, viewed from above the scutellum, appear to be square, but from a point perpendicular above each, they are seen to be slightly more than 90 degs.

**Dryophilodes pictus**, n. sp.

Reddish-castaneous. Clothed with golden-red and whitish pubescence, more or less vittate on elytra; under surface with whitish pubescence.

Antennae moderately long, second joint small, none of the others transverse. Prothorax moderately transverse, sides scarcely arcuate towards base, hind angles slightly more than 90 degs.; punctures crowded, small, and normally concealed; with a faint median line. Elytra slightly wider than prothorax, not quite parallel-sided; with dense punctures, nowhere distinctly seriate in arrangement. Length, 3.25-4 mm.

*Hab.*—South Australia: Adelaide (J. G. O. Tepper), Tumby Bay (Rev. T. Blackburn), Ooldea (A. M. Lea); Western Australia: Swan River (Lea).

A robust species. On specimens in good condition the pubescence is beautifully variegated, but on partial abrasion it appears speckled, instead of longitudinally striped. On the specimens from Tumby Bay and Ooldea the metasternum is almost black, on the others it is not at all, or scarcely, darker than the abdomen.

**Dryophilodes latus, n. sp.**

Castaneous-brown, metasternum and other parts sometimes darker. Moderately clothed with somewhat yellowish pubescence, becoming white on under surface, and obscurely maculate on elytra.

Antennae moderately long. Prothorax about once and two-thirds as wide as long, sides moderately rounded, hind angles more than 90 degs., median line faint; punctures crowded and small. Elytra slightly wider than widest part of

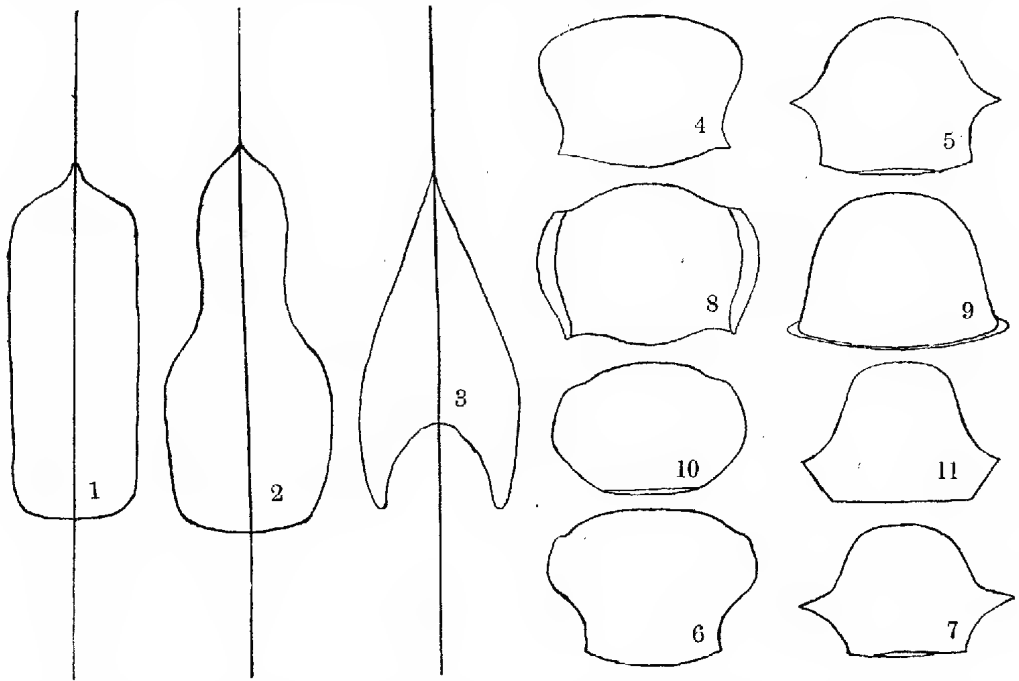
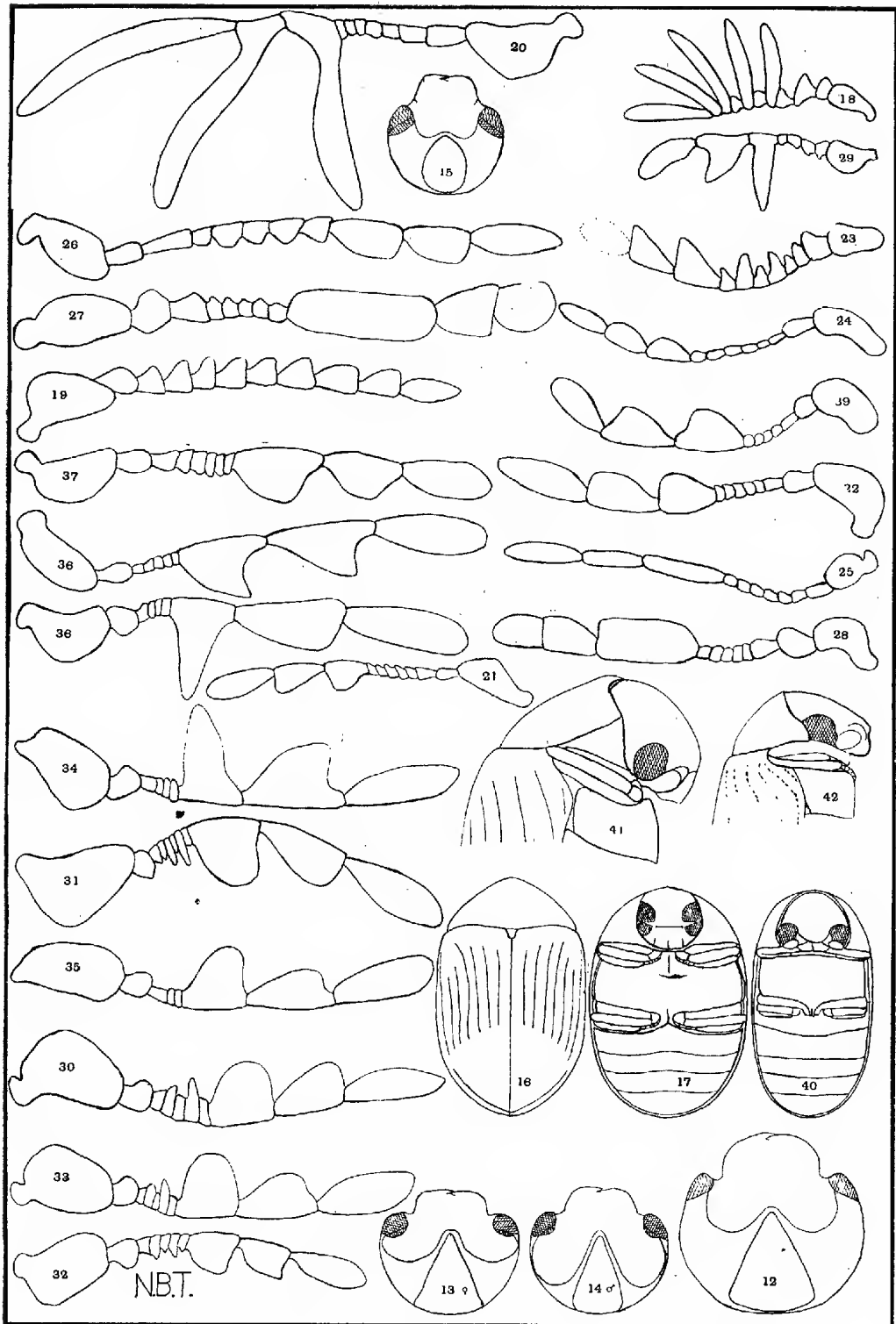


Fig. 1, Pattern of elytral marking of *Dryophilodes insignis*, Blackb.; 2, of *D. pyrifer*, Lea; 3, of *D. sagittifer*, Lea; 4, prothorax of *D. acuticollis*, Lea, as viewed from in front; 5, from behind; 6, *D. seriatus*, Lea, from in front; 7, from behind; 8, *D. marginicollis*, Lea, from in front; 9, from behind; 10, *D. cribripennis*, Lea, from in front; 11, from behind; 12, under surface of head of *Lasioderma serricornis*, Fab.; 13 and 14, of *Aulacanthus lanigerus*, Oll.; 15, of *Deltocryptus punctiventris*, Lea; 16 and 17, of *Dorcatoma irritata*, Lea; 18, antenna of *Derophtinus granicollis*, Lea; 19, of *Secretipes xanthorrhoeae*, Lea; 20, of *Aulacanthus lanigerus*, Oll.; 21, of *Dicoeloccephalus granipennis*, Lea; 22, of *D. obscurus*, Macl.; 23, of *Deltocryptus punctiventris*, Lea; 24, of *D. inamoenus*, Lea; 25, of *Anobium areolicolle*, Lea; 26, of *Pronus subhumeralis*, Lea; 27, of *Calymnaderus pulverulens*, Lea; 28, of *C. inconspicuus*, Lea; 29, of *Caenocara insignicornis*, Lea; 30, of *Dorcatoma intrerocularis*, Lea; 31, of *D. irritata*, Lea; 32, of *D. tasmaniensis*, Lea; 33, of *D. modica*, Lea; 34, of *D. antennalis*, Lea; 35, of *D. punctipennis*, Lea; 36, of *D. subcircularis*, Lea; 37, of *D. punctilatera*, Lea; 38, of *D. rhizobioides*, Lea; 39, of *D. elliptica*, Lea; 40, under surface of *Secretipes xanthorrhoeae*, Lea; 41, side view of *Dicoeloccephalus granipennis*, Lea; 42, of *Deltocryptus punctiventris*, Lea.



prothorax, almost parallel-sided to beyond the middle; punctures crowded and nowhere lineate in arrangement. Length, 3.25-4.25 mm.

*Hab.*—South Australia: Adelaide (A. H. Elston and J. G. O. Tepper), Mount Lofty (Tepper); Western Australia: Geraldton (A. M. Lea).

A robust and rather dingy species, with outlines much as on the preceding one, but differently clothed; the elytra are more densely pubescent or maculate about the base, middle, and near apex than elsewhere, and have the appearance as of being irregularly abraded, but as they are alike on the seven specimens before me (including two taken quite recently) this appearance is evidently natural. On several specimens the abdomen and metasternum are no darker than the elytra, but the metasternum is usually somewhat darker; on one Adelaide specimen the sterna and abdomen are entirely black, and the prothorax, except in front, is rather deeply infuscated; the specimen from Geraldton is similar to the Adelaide one mentioned, except that it is smaller, and that the head is also infuscated.

***Dryophilodes serricornis*, n. sp.**

Black; abdomen and posterior, three-fourths of elytra obscurely diluted with red; antennae, palpi, and tarsi reddish. Clothed with short, depressed, blackish pubescence, becoming somewhat longer and paler on abdomen.

Eyes prominent but not very large. Antennae not very long, second and third joints small, fourth to tenth serrated, eleventh slightly longer than tenth. Prothorax about once and two-thirds as wide as long, sides distinctly margined, base with a deeply impressed line but interrupted in middle, median line feeble but traceable throughout; punctures crowded and small. Elytra no wider than prothorax, parallel-sided to near apex; with crowded and small punctures, nowhere lineate in arrangement, but becoming rather coarse near base. Metasternum with median line from apex to base. Abdomen large, second and fifth segments slightly longer than the others. Length, 4 mm.

*Hab.*—Queensland: Mount Tambourine (A. M. Lea).

From some directions the elytra and abdomen appear to be entirely black. The distinctly serrated antennae and comparatively wide prothoracic margins are at variance with most species of the genus, but it does not appear desirable to propose a new genus for the reception of the single specimen taken.

***Dryophilodes basicollis*, n. sp.**

Black; elytra and abdomen sometimes obscurely diluted with red; antennae, palpi, and parts of legs somewhat reddish. Clothed with short depressed pubescence, becoming conspicuously whitish across basal third of prothorax.

Eyes small and prominent. Antennae moderately long, first and eleventh joints longer than the others, these not much longer than wide. Prothorax moderately transverse, sides rather strongly rounded in front, and distinctly arcuate towards base, hind angles acute, median line not traceable; punctures crowded and small. Elytra no wider than widest part of prothorax, parallel-sided to near apex; with crowded punctures, nowhere distinctly seriate in arrangement. Apical segment of abdomen with a median depression, on each side of which is a small protuberance. Length, 2.25-2.75 mm.

*Hab.*—South Australia: Poonindie (Rev. T. Blackburn), Quorn (A. H. Elston), Ardrossan (J. G. O. Tepper), Murray Bridge; Tasmania: Mount Wellington (A. M. Lea).

On specimens in good condition the white pubescence is conspicuous across the entire base of prothorax, but it is comparatively easily disarranged; in some lights the elytra appear to have a median fascia of white pubescence, but it is never sharply defined, and varies with the point of view. On two specimens the derm of the elytra is entirely black, but on the others its apical two-thirds,

or less, is obscurely diluted with red; the abdomen also varies from entirely black to obscurely reddish. The Murray Bridge specimen has distinctly longer antennae than the others, and the apical segment of its abdomen is simple; the differences are probably sexual.

***Dryophilodes pilipennis*, n. sp.**

Blackish-brown; head, under surface, antennae, palpi, and legs more or less obscurely reddish. Rather densely clothed with stramineous pubescence, longer on elytra than elsewhere, and converging to form lines.

Eyes prominent and rather large. Antennae moderately long and rather thin. Prothorax moderately transverse, sides, as viewed from above, strongly rounded in front, and strongly arcuate towards base, hind angles acute; with crowded punctures. Elytra parallel-sided to near apex; with dense and rather sharply defined punctures, of which some rather larger ones are formed into numerous distinct series. Length, 3.5 mm.

*Hab.*—South Australia: Lucindale (B. A. Feuerhecrdt).

The lineate arrangement of the elytral pubescence and punctures is quite distinct. From behind there appears to be a faint but distinct Y on the prothorax, as the view is altered to a more forward one the Y alters to a V; but many other species appear to have similar Y's and V's.

***Dryophilodes bifoveiventris*, n. sp.**

Deep black and subopaque; parts of antennae, of abdomen, and of legs obscurely diluted with red, palpi flavous. With short depressed pubescence, dark on the upper surface, pale on the under surface.

Antennae not very long, first and eleventh joints moderately long, the others not at all, or scarcely, longer than wide. Prothorax moderately transverse, sides strongly rounded in front and arcuate towards base, hind angles acute; punctures as on head. Elytra no wider than widest part of prothorax, parallel-sided to near apex, with a shallow longitudinal depression in middle of each; punctures crowded and nowhere distinctly lineate in arrangement. Abdomen with a large, round, shining fovea on each side of the apical segment. Length, 3.5 mm.

*Hab.*—Victoria: Birchip (J. C. Goudie, No. 300).

The abdominal foveae may be confined to one sex, but the species is otherwise distinct by its deep-black colour, and by the longitudinal depressions on the elytra. At first glance the hind angles of the prothorax appear to be rounded off, but they are really small and acute.

***Dryophilodes orthodoxus*, n. sp.**

Dark brown or piceous-brown; antennae, palpi, and usually the abdomen, paler. Moderately clothed with pale pubescence.

Eyes small and very prominent. Antennae not very long. Prothorax moderately transverse, sides as viewed from above somewhat angulate in middle and arcuate towards base, hind angles acute, a finely impressed line at median base; punctures slightly larger than on head. Elytra at base no wider than prothorax, almost parallel-sided to near apex; with crowded punctures, larger towards base than elsewhere. Length, 1.75-2 mm.

*Hab.*—New South Wales: Galston (D. Dumbrell), Sydney, Tamworth, Dalmorton (A. M. Lea).

Structurally close to *D. murinus*, but smaller, less densely clothed, and prothorax with the usual finely impressed line across the median base; *D. parvoniger* is narrower, and with the sides of prothorax different, in addition to

being darker. In some lights the punctures about the shoulders appear to be obsoletely seriate in arrangement, and the interstices there to be granulate instead of punctate.

***Dryophilodes metasternalis*, n. sp.**

Dull castaneous-brown; metasternum, and sometimes the abdomen, darker. Moderately clothed with pale depressed pubescence, usually denser in hind angles of prothorax.

Eyes prominent but rather small. Antennae moderately long. Prothorax moderately transverse, sides, as viewed from above, rather suddenly deflected from middle to apex, somewhat arcuate towards base, hind angles somewhat acute. Elytra slightly wider than prothorax, parallel-sided to near apex; with crowded and small punctures, nowhere distinctly seriate in arrangement. Length, 1.75-2.5 mm.

*Hab.*—South Australia: Tumby Bay (Rev. T. Blackburn), Parachilna (H. M. Hale), Lucindale (B. A. Feuerhcerdt); New South Wales: Wollongong, Sydney (A. M. Lea); Queensland: Dalby (Mrs. F. H. Hobler).

The metasternum is usually darker than the abdomen and is sometimes almost black, as is occasionally the base of the abdomen. From some directions the pronotum appears to have a small median elevation near the base; the punctures on the basal third of elytra are larger than elsewhere, and from some directions cause the surface to appear granulate.

***Dryophilodes murinus*, n. sp.**

Dark piceous-brown or blackish; antennae, legs, and sometimes the abdomen, obscurely reddish. Densely clothed with short, depressed, pale (but not white) pubescence, denser on basal half of median line, on hind angles of prothorax, and on scutellum than elsewhere.

Eyes small and prominent. Antennae thin, but not very long. Prothorax moderately transverse, sides, as viewed from above, somewhat produced in middle and distinctly arcuate towards base, hind angles acute; punctures crowded and normally almost concealed. Elytra at base slightly wider than prothorax, not quite parallel-sided to near apex; with crowded and rather small punctures, nowhere distinctly seriate in arrangement, and larger on and about shoulders than elsewhere. Length, 2-2.5 mm.

*Hab.*—Tasmania: Huon River; New South Wales: Sydney (A. M. Lea).

Structurally fairly close to the preceding species, but slightly more robust, darker, and with denser clothing. From some directions a subtriangular space on each shoulder appears less shining than the rest of the elytra, but this is mostly due to the larger punctures there. The absence of a finely impressed line across the median base of the pronotum is rare in the genus. The specimen from Sydney has the legs black and the pubescence of the upper surface somewhat looser, but the latter feature may be due to accident.

***Dryophilodes acuticollis*, n. sp. Figs. 4, 5.**

Black, opaque; antennae, legs, and abdomen dull reddish, palpi paler. With very short pale pubescence, denser on hind angles of prothorax and on scutellum than elsewhere.

Eyes small and very prominent. Antennae rather long and thin. Prothorax scarcely wider at base than the median length; sides, as viewed from above, acutely produced in middle, and distinctly arcuate to base, with the hind angles acute, a faint ridge along middle; punctures as on head. Elytra conspicuously wider than base of prothorax, parallel-sided to near apex; with crowded punctures, nowhere seriate in arrangement, but somewhat larger about



shoulders than elsewhere. Abdomen with a medio-apical impression, on each side of which is a small acute prominence. Length, 2.75-3 mm.

*Hab.*—Tasmania: Hobart (A. M. Lea).

The type appears to be a male. A second specimen, from Hobart, is probably a female, as its abdomen is simple, it is smaller than the type, the elytra vaguely dilated with red posteriorly, and the metasternum no darker than the abdomen. A specimen from Forest Reefs (New South Wales) appears to be another female of the species, but has the under surface black. The prothorax of all the specimens, when viewed from above, or from behind the scutellum, appears to have the sides acute or even spinose in the middle, but from a frontal view the sides appear rounded from the middle to the apex.

***Dryophilodes parvoniger*, n. sp.**

Deep black; antennae, palpi, and legs reddish. Clothed with short, depressed, ashen pubescence.

Eyes small and prominent. Antennae rather short, only the first and eleventh joints conspicuously longer than wide. Prothorax moderately transverse, sides rounded in middle and arcuate towards base, hind angles somewhat acute; punctures slightly larger than on head. Elytra very little wider than widest part of prothorax, parallel-sided to near apex; with crowded punctures, near base obscurely lineate in arrangement and larger than elsewhere. Length, 2 mm.

*Hab.*—New South Wales: Galston (A. M. Lea).

A small, comparatively narrow, black species; in some lights the abdomen appears obscurely reddish.

***Dryophilodes brunneipennis*, n. sp.**

Black; elytra dingy brown; antennae, palpi, and legs paler. With depressed pale pubescence.

Eyes small and prominent. Antennae not very long. Prothorax not much wider than long; sides, as viewed from above, somewhat prominent in middle, distinctly arcuate towards base, hind angles acute; punctures slightly coarser than on head. Elytra slightly wider than widest part of prothorax, parallel-sided to near apex; with dense punctures, somewhat asperate and larger on basal half than elsewhere, and more or less lineate in arrangement, except on parts of the apical slope. Length, 2.25-3 mm.

*Hab.*—South Australia: Lucindale (B. A. Feuerhcerdt), Mount Lofty (A. H. Elston and J. G. O. Tepper); Western Australia: Geraldton (A. M. Lea); Tasmania: Mount Wellington (Lea).

The apex of the prothorax is usually narrowly reddish, the abdomen is sometimes as black as the metasternum, but is often obscurely reddish, the femora are somewhat infuscated in the middle; on several specimens the sides below the shoulders are slightly infuscated. A vague median line may mostly be traced on the apical half of the pronotum, and sometimes a vague oblique impression on each side of the middle near base. The lineate arrangement of the elytral punctures is distinct from many directions, but from some points of view the shoulders appear to be covered with small crowded granules. The specimen from Geraldton is rather thinner, and has slightly longer antennae and pubescence than usual.

***Dryophilodes apicipennis*, n. sp.**

Black; antennae, palpi, and parts of legs reddish, elytra more or less reddish about apex. With short, depressed, pale pubescence.

Eyes small and very prominent. Antennae moderately long, none of the joints transverse. Prothorax moderately transverse, sides prominent in middle,

arcuate towards base, hind angles acute, median line fairly distinct, a feeble oblique impression on each side of middle towards base; punctures larger than on head. Elytra slightly wider than widest part of prothorax, parallel-sided to near apex; with fairly large asperate punctures, in rows about basal half and on sides, becoming smaller and irregular posteriorly. Length, 2.2-5 mm.

*Hab.*—South Australia: Mount Lofty (S. H. Curnow, A. H. Elston, and J. G. O. Tepper).

Structurally rather close to the preceding species, but elytra deep black except posteriorly, where on two specimens they are obscurely diluted with red, and on two others distinctly reddish.

***Dryophilodes eucalypti*, n. sp.**

Black, opaque; abdomen and tarsi obscurely reddish, palpi paler, elytra obscurely diluted with red posteriorly. Moderately clothed with short, depressed, dingy pubescence.

Eyes prominent and moderately large. Antennae rather long, all the joints distinctly longer than wide. Prothorax very little wider at base than the median length; sides, as viewed from above, acute in middle and arcuate to base, hind angles acute and overhanging elytra; with crowded, but fairly sharply defined punctures. Elytra scarcely wider than widest part of prothorax, parallel-sided to near apex; with close-set rows of asperate punctures, becoming smaller, more crowded and irregular posteriorly. Length, 3.5-4.25 mm.

*Hab.*—Victoria: Seaford, numerous specimens reared from eucalyptus galls (J. F. Dixon), Birchip (J. C. Goudie).

On several specimens the abdomen is almost as black as the metasternum; the antennae are entirely black, or with only the apical joints obscurely reddish. From some directions there appears to be a feeble pubescent Y on the pronotum; seen directly from above the scutellum, or from a more posterior point, the sides of the prothorax appear to be acutely produced, but from in front they are seen to be quite evenly rounded on the apical half.

***Dryophilodes acutangulus*, n. sp.**

Black, in parts subopaque; elytra obscurely diluted with red posteriorly, antennae, palpi, legs, and abdomen dull reddish, sterna somewhat darker. Clothed with short, depressed, pale pubescence.

Eyes small and very prominent. Antennae moderately long, a few of the joints scarcely longer than wide. Prothorax moderately transverse; sides, as viewed from above, rather acutely produced in middle, strongly arcuate to base, hind angles acute; punctures slightly larger than on head, appearing like small granules from some directions. Elytra comparatively short, no wider than widest part of prothorax, parallel-sided to near apex; with crowded and small punctures; in addition, except posteriorly, with rows of fairly large asperate ones. Length, 3.5 mm.

*Hab.*—New South Wales: Forest Reefs (A. M. Lea).

The head and prothorax are about as large as on the preceding species, but the elytra, although of the same width, are distinctly shorter, as a result the species is wider in proportion; the hind angles of the prothorax are quite as acute as on that species, but they are produced outwards, instead of slightly overhanging the elytra.

***Dryophilodes brevicollis*, n. sp.**

Dull brown and subopaque; antennae, palpi, and legs paler. Moderately clothed with short, depressed, pale pubescence.

Head more convex in middle than usual. Eyes of moderate size and very prominent. Antennae not very long, but all the joints, except the second, longer than wide. Prothorax almost twice as wide as long, sides strongly rounded in front, arcuate towards base, hind angles acute and slightly overhanging elytra, median line fairly distinct; punctures crowded and small. Elytra comparatively short, distinctly wider than prothorax, almost parallel-sided to near apex; with fairly regular rows of asperate punctures, the rows almost vanishing posteriorly, the interstices everywhere with small crowded punctures. Length, 3 mm.

*Hab.*—South Australia: Lucindale (B. A. Feuerheerdt).

A rather wide species, structurally fairly close to *D. acutangulus*, but differently coloured. Two specimens from New South Wales (Forest Reefs and Armidale, A. M. Lea) probably belong to the species, but have most of the pronotum deeply infuscated, almost black, and the elytra also deeply infuscated, except on the sides (very narrowly) and along the suture.

#### ***Dryophilodes subhumeralis*, n. sp.**

Dull piceous-brown; legs, abdomen, and hind parts of elytra more reddish; with short, depressed, and mostly pale pubescence.

Eyes small and very prominent. Antennae rather long and thin, none of the joints transverse. Prothorax at base scarcely wider than the median length; sides, as viewed from above, acutely angulate in middle and arcuate to base, hind angles acute; median line faint in front, slightly raised posteriorly; punctures as crowded as on head but slightly larger. Elytra distinctly wider than prothorax, parallel-sided to near apex; with crowded punctures, becoming larger and with a granulate appearance about base, about and for a short distance behind shoulders somewhat seriatly arranged. Length, 2.25 mm.

*Hab.*—South Australia: Karoonda to Peebinga (G. E. H. Wright), Quorn (A. H. Elston), Lucindale (A. M. Lea).

From some directions there appears to be a distinct dark-velvety patch on the side near each shoulder, but this disappears when the side is viewed at a right angle. Although referred to C, *ff*, in the table, the seriate arrangement of the elytral punctures is rather faint.

#### ***Dryophilodes rufobrunneus*, n. sp.**

Dull reddish-brown; moderately clothed with short stramineous pubescence.

Eyes prominent and comparatively large. Antennae moderately long and thin. Prothorax at base very little wider than the median length; sides, as viewed from above, acute in middle and rather strongly arcuate to base, a vague oblique depression on each side of middle towards base; densely granulate-punctate. Elytra comparatively narrow, but distinctly wider than prothorax, parallel-sided to near apex; with closely placed series of asperate punctures to well beyond the middle, with crowded and small punctures all over. Length, 3.325 mm.

*Hab.*—South Australia: Lipson's Cove, under bark; New South Wales: Werris Creek (Rev. T. Blackburn).

From most points of view the prothorax and elytra appear to be closely covered with small granules. The Werris Creek specimen is slightly larger and darker than two from Lipson's Cove, but otherwise is in close agreement with them.

#### ***Dryophilodes seriatus*, n. sp. Figs. 6, 7.**

Dull reddish-brown; abdomen and legs somewhat paler; with very short pale pubescence.

Eyes small and prominent. Antennae not very long, several of the joints very little longer than wide. Prothorax at base not much wider than the median length; sides, as viewed from above, acutely produced in middle and arcuate to base, a shallow oblique depression on each side of middle near base; densely granulate-punctate. Elytra rather thin, much wider than base of prothorax, parallel-sided to near apex; with close-set rows of subquadrate punctures, becoming smaller posteriorly but traceable almost to apex; interstices with small punctures. Length, 3 mm.

*Hab.*—Tasmania: Hobart (A. M. Lea).

In general appearance rather close to the preceding species, but slightly narrower, elytra with seriate punctures less asperate, traceable close to the apex itself, and the interstices with minute punctures, nowhere causing them to appear granulate. From some directions the hind angles of the prothorax appear to be more than 90 degs., but from a perpendicular point of view they are seen to be less.

***Dryophilodes flavipalpis*, n. sp.**

Dull castaneous-brown; abdomen and legs paler, palpi flavous. Rather densely clothed with short pale pubescence, denser on hind angles of prothorax than elsewhere.

Eyes small and prominent. Antennae not very long, some of the joints scarcely, if at all, longer than wide. Prothorax at base not much wider than the median length, sides strongly rounded in middle and arcuate to base, hind angles acute and slightly overlapping elytra; punctures crowded but partially concealed. Elytra not much wider than widest part of prothorax, parallel-sided to near apex; with dense and minute punctures, and fairly distinct rows of larger ones, disappearing posteriorly. Length, 2.5-3 mm.

*Hab.*—South Australia: Murray Bridge (Rev. T. Blackburn), Barossa (A. H. Elston), Ooldea (A. M. Lea); Western Australia: Swan River (Lea).

The seriate punctures on the elytra are distinct from most directions, they are rather stronger towards the sides than suture.

***Dryophilodes interstitialis*, n. sp.**

Colour and clothing as described in preceding species.

Head as in preceding species. Prothorax moderately transverse, sides angulate but not apparently spinose in middle, somewhat arcuate to base, hind angles acute; punctures crowded and with a granulated appearance. Elytra not much wider than widest part of prothorax; with close-set rows of rather large asperate punctures, the rows disappearing posteriorly, the surface generally with a distinctly granulated appearance. Length, 2.25-2.5 mm.

*Hab.*—Western Australia: Mount Barker (R. Helms), Swan River (A. M. Lea).

In general appearance decidedly close to the preceding species, but slightly more robust, and seriate punctures of elytra somewhat larger and more asperate, and the interstices between them with a distinctly granulated appearance, that is wanting in that species.

***Dryophilodes pulverulentus*, n. sp.**

Dull castaneous-brown; abdomen, legs, and hind parts of elytra somewhat paler, palpi flavous. Clothed with extremely short pubescence, almost dust-like on the elytra.

Eyes of moderate size and very prominent. Antennae moderately long, most of the joints scarcely or not at all longer than wide. Prothorax with outlines as in preceding species, but with somewhat smaller punctures. Elytra with

outlines as in preceding species, but punctures and interstices as on *D. flavipalpis*. Length, 2.25-2.75 mm.

*Hab.*—South Australia: Tumby Bay (Rev. T. Blackburn), Lucindale (A. M. Lea); New South Wales: Queanbeyan (Lea).

Structurally and in general appearance very close to the two preceding species, but the characters noted in the table are sufficiently distinctive when specimens of each are placed side by side. The general outlines are nearer those of *D. interstitialis*, than those of *D. flavipalpis*, but the elytral punctures of *D. interstitialis* are decidedly coarser than on either of the others.

### ***Dryophilodes melanostethus*, n. sp.**

Dull reddish-castaneous; metasternum black. Rather densely clothed with short pale pubescence, denser on hind angles of prothorax and on scutellum than elsewhere.

Eyes rather small and very prominent. Antennae not very long, second to fourth joints scarcely longer than wide. Prothorax moderately transverse, sides not very strongly rounded in middle and somewhat arcuate to base, hind angles acute; punctures crowded and (except at apex) slightly larger than on head. Elytra at base scarcely wider than widest part of prothorax, sides not quite parallel to near apex; with close-set rows of fairly large asperate punctures, becoming smaller posteriorly, surface generally with small punctures, but between the rows with a granulated appearance. Length, 2-3 mm.

*Hab.*—South Australia: Adelaide (J. G. O. Teppcr), Quorn (A. H. Elston), Murray Bridge (A. M. Lea); New South Wales: Sydney, reared from coccid galls (W. W. Froggatt), Tamworth (Lea).

In general appearance close to *D. metasternalis*, but elytra with distinct series of punctures. The basal segment of the abdomen is usually black, and occasionally the whole abdomen is dark, although hardly as black as the metasternum. Two of the South Australian specimens are decidedly below the average size, and have a suggestion of the subhumeral velvety patches of *D. subhumeralis*, from which they are at once distinguished by the sides of the prothorax. The pubescence on the hind parts of the elytra, of the South Australian specimens, in some lights, has a distinct golden-red gloss. The New South Wales specimens have a darker and duller appearance than the others, and their pubescence is slightly longer and denser, but otherwise they agree well with typical ones.

### ***Dryophilodes subcylindricus*, n. sp.**

Black, palpi and parts of legs reddish. Pubescence extremely short, pale, and depressed.

Eyes small and prominent. Antennae rather long and thin, second and third joints smaller than the others. Prothorax about one-fourth wider than long, strongly and evenly convex, except for a slight medio-basal elevation, sides strongly and evenly rounded, hind angles obtuse; punctures as on head. Elytra parallel-sided to near apex, slightly narrower than widest part of prothorax; with crowded and small, non-seriate punctures. Length, 2-2.5 mm.

*Hab.*—South Australia: Mount Lofty Ranges, Myponga, Barossa (A. H. Elston), Karoonda to Peebinga (G. E. H. Wright), Parachilna (E. L. Savage), Lucindale (B. A. Feuerheerdt), Port Lincoln (Rev. T. Blackburn and A. M. Lea), Gawler (Lea); Tasmania: Huon River, Mount Wellington, Hobart (Lea).

A narrow, subcylindrical, black species, appearing greyish on account of its minute pubescence. The tarsi and usually the tibiae are reddish, but the latter are sometimes almost as dark as the femora; the antennae are usually blackish, but are occasionally obscurely reddish, rarely the abdomen is obscurely diluted

with red. The antennae vary somewhat in length, and the median joints of the male are stouter than those of the female. Three specimens, from Quorn (A. H. Elston), probably belong to this species, but have the apical half of elytra and the antennae obscurely reddish, and the tibiae and tarsi of a brighter red than usual.

Should it be eventually decided to split up the genus this species and *D. vigilans*, *D. angustus*, and *D. minor* should be associated together, although now separated by the exigencies of the table.

var. **brunneus**, n. var.

Nine specimens from South Australia—Myponga and Quorn (A. H. Elston), Lucindale (B. A. Feuerheerdt), Oodnadatta (Rev. T. Blackburn), and Mount Gambier (A. M. Lea)—appear to belong to this species, but differ from the others in being of a more or less dingy brown, with the sterna (and on two specimens the head) black.

**Dryophilodes fumosus**, n. sp.

Dull dark brown, sterna darker. Closely covered with short ashen pubescence, appearing almost white on scutellum.

Eyes not very large but very prominent. Antennae moderately long and thin. Prothorax moderately transverse, sides strongly rounded in middle, where the width is slightly more than that of elytra, hind angles slightly more than right angles; punctures much as on head. Elytra parallel-sided to near apex; with crowded and small punctures, but towards base and sides with obscure series of larger ones. Length, 3 mm.

*Hab.*—Northern Queensland (Blackburn's collection).

A subcylindrical, dingy-brown species; although distinct from all other species before me, its position in the table is somewhat doubtful, as, from some directions, a lineate arrangement of punctures is traceable towards the base of elytra, and it is rather narrower than the other species referred to *yy*.

**Dryophilodes robustus**, n. sp.

Dull reddish-brown; sterna almost black. Densely clothed with more or less golden pubescence, becoming whitish on under surface and on scutellum.

Eyes small and prominent. Antennae moderately long and thin. Prothorax not much wider than long, sides strongly rounded in middle and somewhat arcuate to base, hind angles slightly more than 90 degs., punctures larger than on head. Elytra slightly wider than prothorax, not thrice as long as wide, parallel-sided to near apex; with small crowded punctures. Length, 2.75-3.25 mm.

*Hab.*—South Australia (A. H. Elston), Parachilna (E. L. Savage); New South Wales: Gosford (A. M. Lea).

A rather robust species, with elytral pubescence from some directions appearing of a beautiful golden-red; the pubescence at the base of the prothorax is scarcely as white as on the scutellum, although it is paler than on the rest of the upper surface. The punctures of the upper surface are usually concealed by the clothing, but where this has been abraded they are seen to be more sharply defined than is usual in the genus.

**Dryophilodes niger**, n. sp.

Black; legs and muzzle reddish, apical slope of elytra and tip of abdomen obscurely reddish. With short, depressed, whitish pubescence, denser on scutellum and on hind angles of prothorax than elsewhere.

Eyes small and very prominent. Antennae moderately long. Prothorax about once and one-half as wide as long, sides strongly rounded, hind angles obtuse; punctures somewhat larger than on head. Elytra rather robust, the width of base of prothorax, parallel-sided to near apex; with crowded punctures, nowhere seriate in arrangement, but larger towards base than posteriorly. Length, 2.2-2.5 mm.

*Hab.*—South Australia: Ooldea (A. M. Lea).

A short black species, with somewhat silvery clothing. On the type the legs are distinctly reddish, on a second specimen they are almost black; the antennae of both specimens appear to be black, but on close examination some of the joints are seen to be obscurely brownish. From some directions the upper surface appears to be granulate, rather than punctate; this is especially noticeable on the sides of the prothorax.

***Dryophilodes pullatus*, n. sp.**

Black; apex of elytra, abdomen, antennae, palpi, and parts of legs more or less obscurely reddish. Rather densely clothed with dingy ashen pubescence, having a rather loose appearance on upper surface.

Eyes rather small and very prominent. Antennae rather thin. Prothorax moderately transverse, sides strongly rounded, hind angles apparently rounded off; punctures crowded and slightly larger than on head. Elytra the width of widest part of prothorax, parallel-sided to near apex; with rather dense punctures, becoming smaller posteriorly. Length, 3.5 mm.

*Hab.*—Tasmania: Kelso (Aug. Simson).

A black subcylindrical species, in general appearance strikingly close to several species of *Dasytes*, of the Malacodermidae. The hind angles of the prothorax are small, but from most directions they appear to be completely rounded off; the elytral punctures are larger and sparser on the sides near the shoulders than elsewhere, and from some directions they appear to be lincate in arrangement, but from above the lineate arrangement is nowhere evident. The metasternum is more shining than is usual in the genus.

***Dryophilodes albus*, n. sp.**

Dull reddish-brown; palpi and abdomen usually paler. Densely clothed with white pubescence.

Eyes small and prominent. Antennae moderately long. Prothorax moderately transverse, sides somewhat rounded in middle and oblique to base, hind angles slightly overlapping elytra and slightly more than 90 degs.; punctures crowded and normally concealed. Elytra slightly wider than prothorax, parallel-sided to near apex; with crowded punctures, the basal half or two-thirds in addition with series of larger ones. Length, 2.75-3.25 mm.

*Hab.*—South Australia: Myponga (A. H. Elston), Kangaroo Island (J. G. O. Tepper), Lucindale (B. A. Feuerherdt), Mount Gambier (A. M. Lea); Victoria: Cheltenham, in November (F. E. Wilson); Tasmania: Kelso, Karoola, Georgetown, Beaconsfield (Aug. Simson), Huon River, Ulverstone, Hobart (Lea), Strahan (H. J. Carter and Lea); New South Wales: National Park, Sydney (Lea).

Some of the specimens are darker than usual (almost piceous-brown), but the pubescence appears to be always whitish. There are seriate punctures on at least the basal half of elytra, but it is usually necessary to partly abrade the pubescence to be sure of this.

**Dryophilodes multiseriatus**, n. sp.

Black; clytra, palpi, legs, and basal half of antennae of a more or less dingy brown; with short, pale, inconspicuous pubescence.

Eyes rather large and very prominent. Antennae comparatively short. Prothorax moderately transverse; sides, as viewed from above, subacutely produced in middle, hind angles obtuse, each side of middle with two shallow impressions, an oblique one and a transverse one, meeting in middle of base; punctures slightly larger than on head. Elytra wider than prothorax, parallel-sided to near apex; with close-set rows of fairly large punctures, terminated just before the apical slope, on which all the punctures are minute. Length, 2.2-2.5 mm.

*Hab.*—South Australia: Port Lincoln (Rev. T. Blackburn), Ooldea (A. M. Lea).

The impressions on the pronotum and the seriate punctures on the elytra are more conspicuous than usual. One specimen, probably immature, is of a dingy brown, with the clytra and legs almost flavous.

**Dryophilodes latipennis**, n. sp.

Black; clytra, antennae, and legs of a dingy reddish-brown, palpi paler. Moderately clothed with short ashen pubescence.

Eyes small and prominent. Antennae rather short, only the first and eleventh joints distinctly longer than wide. Prothorax distinctly transverse, sides moderately rounded, hind angles more than 90 degs., median line fairly distinct; punctures slightly larger than on head. Elytra slightly wider than prothorax, scarcely twice as long as wide, sides almost parallel to near apex; with crowded and small punctures, and, in addition, with rather inconspicuous series of larger ones on basal two-thirds. Length, 2.5-3.75 mm.

*Hab.*—Western Australia: Swan River, Darling Ranges, Bridgetown (A. M. Lea).

With the robust form of *D. latus*, but elytral pubescence uniform throughout, although sometimes denser on scutellum and on hind angles of prothorax than elsewhere. The front edge of the prothorax is usually obscurely reddish.

**Dryophilodes brevicornis**, n. sp.

Black; elytra, abdomen, antennae, and legs of a more or less dingy reddish-brown, palpi paler. Moderately clothed with short ashen pubescence.

Eyes small and prominent. Antennae rather short, most of the joints wider than long. Prothorax moderately transverse; sides, as viewed from above, somewhat acutely produced in middle, hind angles more than 90 degs.; punctures slightly larger than on head. Elytra slightly wider than widest part of prothorax, parallel-sided to near apex; with small crowded punctures, the basal two-thirds with inconspicuous rows of larger ones. Length, 2.5 mm.

*Hab.*—South Australia: Port Lincoln (A. M. Lea).

At first sight very near *D. brunneipennis*, but antennae somewhat shorter and prothorax more convex in middle, with its hind angles more than 90 degs.

**Dryophilodes marginicollis**, n. sp. Figs. 8, 9.

Dull dark brown; abdomen and palpi paler. Clothed with short ashen pubescence.

Eyes of moderate size and very prominent. Antennae not very long. Prothorax moderately transverse, strongly convex, sides distinctly margined from base to apex; densely granulate-punctate. Elytra slightly wider than prothorax, parallel-sided to near apex; with crowded and small punctures, and in addition with larger seriate ones, distinct above base and shoulders, but vanishing on apical third. Length, 3 mm.



*Hab.*—North-western Australia: Fortescue River (W. D. Dodd).

The prothoracic margins are somewhat as in *D. serricornis*, but the antennae are normal. From some directions the hind angles of the prothorax appear to be acute, but from others to be obtuse or even rounded off. On the type the elytra are somewhat paler on the apical slope than elsewhere, and each side near the shoulder, from some directions, appears to have a dark velvety patch, but this disappears when viewed at a right angle.

***Dryophilodes ubiquitousus*, n. sp.**

Dull dark brown; abdomen and palpi paler. Densely clothed with rather short ashen pubescence, denser and paler on scutellum, and on hind angles of prothorax than elsewhere.

Eyes fairly large and very prominent. Antennae not very long. Prothorax about once and two-thirds as wide as long; sides, as viewed from above, subacutely produced in middle, hind angles obtuse, median line faintly impressed in front; punctures slightly larger than on head. Elytra scarcely wider than widest part of prothorax, parallel-sided to near apex; with crowded and small punctures, and close-set series of larger ones, distinct on basal half but vanishing posteriorly. Length, 2.5-3 mm.

*Hab.*—South Australia: Adelaide, Barossa (A. H. Elston), Mount Lofty (S. H. Curnow), Lucindale (B. A. Feuerheerdt and F. Secker), Tumby Bay (Rev. T. Blackburn), Kangaroo Island (J. G. O. Tepper and A. M. Lea); Victoria: Alps (Blackburn), Birchip (J. C. Goudie); New South Wales (Blackburn), Forest Recfs, Galston, Sydney (Lea); Northern Queensland (Blackburn's collection).

A fairly robust, dingy species; one of the specimens from New South Wales is almost black. The clothing on the hind angles of the prothorax is not perhaps actually paler than elsewhere, but from most directions it appears to be so, probably from its greater density.

***Dryophilodes obscuripennis*, n. sp.**

Black; antennae, palpi, and legs (the femora sometimes excepted) of a dingy reddish, elytra obscurely diluted with red posteriorly. Moderately clothed with dingy ashen pubescence.

Eyes rather small and very prominent. Antennae moderately long. Prothorax almost twice as wide as long; sides, as viewed from above, evenly rounded in middle, hind angles slightly more than 90 degs., median line faintly traceable from base to apex; punctures much as on head. Elytra slightly wider than prothorax, parallel-sided to near apex; with dense and small punctures, in addition with close-set series of fairly large ones, well defined on basal third, but vanishing before apical slope. Length, 2.25-3 mm.

*Hab.*—New South Wales: Galston (D. Dumbrell and A. M. Lea).

A rather robust species, structurally close to *D. latipennis*. The base of the elytra appears to be always as dark as the prothorax, but the hind parts are more or less obscurely paler; from some directions the derm about the shoulders appears to be covered with small granules.

***Dryophilodes abjectus*, n. sp.**

Dull castaneous-brown; with short pale pubescence.

Eyes rather small and prominent. Antennae fairly long and rather thin. Prothorax about once and two-thirds as wide as long; sides, as viewed from above, rather sharply angulate in middle, hind angles more than 90 degs.; closely granulate-punctate. Elytra scarcely wider than widest part of prothorax, parallel-sided to near apex; with crowded and small punctures, about base with

series of larger ones, but the series scarcely traceable to middle, except on sides. Length, 1.75 mm.

*Hab.*—South Australia: Port Lincoln (Rev. T. Blackburn).

A small dingy species. The palpi and legs are paler than the other parts but not very conspicuously so.

A specimen from Tasmania (Karoola, Aug. Simson) possibly belongs to this species, but its prothorax is less transverse, and the elytral punctures are larger and more asperate, with the lincate arrangement of the larger ones traceable almost to the apical slope.

***Dryophilodes subapicalis*, n. sp.**

Dull, dark castaneous-brown; with short, depressed, pale pubescence.

Eyes of moderate size and very prominent. Antennae rather long and thin, all the joints, except the second, longer than wide. Prothorax strongly transverse, sides strongly rounded, hind angles obtuse; punctures crowded and small. Elytra elongate, scarcely wider than widest part of prothorax, parallel-sided to near apex; densely granulate-punctate, in addition with close-set rows of asperate punctures, distinct to well beyond the middle, and on the sides almost to apex. Length, 3.75-4.5 mm.

*Hab.*—Western Australia: Swan River (A. M. Lea).

A comparatively large subcylindrical species. On the apical slope of elytra there appears to be a large and fairly distinct reddish spot, narrowly traversed by the dark suture; the suture, in fact, is very narrowly blackish throughout, but is only conspicuously so where it traverses the paler portion; on the larger of two specimens the abdomen is somewhat paler than the metasternum. From some directions the pubescence on the upper surface has a reddish gloss. The hind angles of the prothorax are about 120 degs., but from some directions they appear to be rounded off. From most points of view the elytral interstices appear to be distinctly granulate rather than punctate, whilst the shoulders and about the base seem roughly granulate.

***Dryophilodes vigilans*, n. sp.**

Black, some parts opaque; palpi, tibiae, and tarsi reddish; with extremely short, dingy, depressed pubescence.

Eyes rather large and very prominent. Antennae rather long and thin, median joints stouter, second smallest. Prothorax moderately transverse, sides strongly and evenly rounded; punctures as on head. Elytra long, thin and parallel-sided, slightly narrower than widest part of prothorax; with dense and minute punctures, and with series of larger ones, fairly distinct on the basal half, but vanishing posteriorly. Length, 2.5-3.25 mm.

*Hab.*—New South Wales: Forest Reefs (A. M. Lea).

A thin black species, structurally close to *D. subcylindricus*, but consistently larger, eyes larger and elytral punctures seriate in arrangement on the basal half, although the arrangement is indistinct from most directions. In the male the tip of the abdomen is slightly notched, and the eyes are larger than in the female. The antennae are usually of a dingy reddish-brown, with the basal joint darker, the tips of the abdominal segments are usually reddish, occasionally the entire abdomen is obscurely diluted with red. The median base of the pronotum, although not elevated above the front parts, is slightly elevated above the adjacent surface. Four specimens have the prothorax and elytra obscurely brownish, but are probably immature. A specimen from Mount Kosciusko (W. E. Raymond) probably belongs to the species, but has the elytra of a dark reddish-brown, except that a large subtriangular space about the scutellum, and the shoulders, are black.

**Dryophilodes planicollis**, n. sp.

Black; elytra, antennae, palpi, and legs (except femora) more or less reddish, abdomen obscurely reddish posteriorly. Clothed with ashen pubescence, with a rather loose appearance.

Eyes small and very prominent. Antennae rather long and thin, all the joints, except the second, longer than wide. Prothorax rather flat, not much wider than long, sides strongly rounded and very finely serrated, hind angles obtuse, median line faintly marked; punctures slightly larger than on head. Elytra rather thin, scarcely wider than widest part of prothorax, but conspicuously wider than its base, parallel-sided to near apex; with fairly dense punctures about base, but becoming comparatively sparse posteriorly. Length, 2.25 mm.

*Hab.*—Western Australia: Swan River (A. M. Lea).

The prothorax is flatter than usual, practically only the front sides sloping downwards, its hind angles also are almost rounded off, the minute serrations of the sides are somewhat obscured by the clothing. The elytral punctures are rather sharply defined, but are comparatively sparse posteriorly, and their lineate arrangement is feeble, even near the base.

**Dryophilodes nigrinus**, n. sp.

Black, some parts paler. Rather sparsely clothed with ashen pubescence.

Eyes of moderate size and very prominent. Antennae not very long, only the first and eleventh joints distinctly longer than wide. Prothorax moderately transverse, sides strongly rounded, the greatest width equal to that of elytra, hind angles obtuse; punctures small and crowded. Elytra rather thin, parallel-sided to near apex; with close-set rows of fairly large punctures, becoming smaller posteriorly, but distinct almost to apical slope. Length, 2.2-2.5 mm.

*Hab.*—South Australia: Port Lincoln (Rev. T. Blackburn), Mount Lofty (N. B. Tindale).

In general appearance much like *D. planicollis*, but the seriate arrangement of the elytral punctures is distinct to well beyond the middle. Five specimens are before me; of these four have the elytra black, with the hind parts more or less obscurely diluted with red, the other has the elytra of a dingy brown throughout; the antennae and legs are blackish, except that the tarsi are obscurely reddish; even the palpi are dark. The prothorax has several very vague discal impressions, and usually a shining but feeble median elevation near the base; the hind angles from some directions appear to be rounded off, from others each appears as a minute tooth. One specimen is distinctly wider than the others, but may represent a variety.

**Dryophilodes politus**, n. sp.

Black; apical parts of elytra and parts of legs, of antennae, and palpi more or less reddish. With sparse ashen pubescence.

Eyes rather small and very prominent. Antennae thin but not very wide. Prothorax scarcely wider than long, sides subacutely produced in middle, hind angles obtuse; punctures crowded and somewhat coarser than on head, but becoming very small on a shining space at middle of apex, and on a shining median line, the latter abruptly terminated near base. Elytra shining, conspicuously wider than widest part of prothorax, and much wider than its base, parallel-sided to near apex; with close-set rows of fairly large punctures, disappearing posteriorly, where the surface is minutely punctate. Length, 1.75-2 mm.

*Hab.*—South Australia: Mount Lofty (S. H. Curnow); Western Australia: Swan River (A. M. Lea).

This species has the general appearance as of the New Zealand genus *Sphinditeles* (*Mesanolobium* of Sharp), and it may be desirable eventually to refer it to that genus. On the type the apical slope of elytra (except that the suture is very narrowly dark) is of a rather bright reddish-flavous; on the Swan River specimen the apical slope is but obscurely diluted with red, on each of them the apical half of the antennae is blackish. Owing to the sparsity of pubescence the punctures are more sharply defined than usual.

***Dryophilodes subopacus*, n. sp.**

Black, subopaque; tarsi, knees, and coxae reddish, apical slope of elytra obscurely diluted with red. Moderately clothed with short ashen pubescence.

Eyes fairly large and very prominent. Antennae moderately long, but only the first and eleventh joints distinctly longer than wide. Prothorax not much wider than long, sides strongly rounded in middle (from some directions appearing subacute there); median line somewhat shining and fairly distinct near base; punctures crowded and small. Elytra wider than widest part of prothorax, and much wider than its base, parallel-sided to near apex; with crowded and small punctures or finely shagreened, in addition with close-set rows of fairly large asperate punctures, distinct to well beyond the middle, and on the sides almost to apex. Length, 2 mm.

*Hab.*—New South Wales: National Park (A. M. Lea).

A narrow dingy species, but with parts of the under surface shining; the elytra at first appear to be as black as the prothorax, but when closely examined are seen to be obscurely paler. Partly owing to the clothing most parts of the upper surface appear to be minutely granulate. Structurally it is rather close to the preceding species, but is duller, more densely clothed, and the prothorax and eyes are larger.

***Dryophilodes minor*, n. sp.**

Picuous or blackish, legs and abdomen more or less reddish. Rather densely clothed with pale pubescence, having a rather loose appearance.

Head with crowded, partially concealed, punctures. Eyes small and very prominent. Antennae rather long and thin. Prothorax moderately transverse, sides strongly rounded and slightly wider than elytra, hind angles obtuse; with small crowded punctures. Elytra rather thin, parallel-sided to near apex; with crowded and small punctures, the basal half with obscure series of larger ones. Length, 1.75-2 mm.

*Hab.*—Tasmania: Huon River (A. M. Lea).

A small, narrow, dingy species, whose specimens have the general appearance as of females of *Cis*. The prothorax usually appears to be blackish, with the apex rather widely reddish, or sometimes with both base and apex reddish; on some specimens the derm of the elytra appears blackish, but it is usually of a dingy brown; the metasternum is usually darker than the abdomen, and the apical half of the antennae is darker than the basal half.

***Dryophilodes cribripennis*, n. sp. Figs. 10, 11.**

Dull reddish-brown; abdomen and parts of legs somewhat paler. Moderately clothed with rather short pale pubescence, denser on scutellum and on hind angles of prothorax than elsewhere.

Eyes small and prominent. Antennae moderately long, most of the joints longer than wide. Prothorax moderately transverse, sides, as viewed obliquely from behind, apparently acutely produced at basal third, but oblique to base.

hind angles obtuse; median line faint but distinct from some directions; punctures crowded and slightly larger than on head. Elytra rather narrow but much wider than base of prothorax, parallel-sided to near apex; with dense and small but rather sharply defined punctures, and in addition with close-set rows of larger asperate ones, becoming smaller posteriorly, but distinct to summit of apical slope and on the sides to apex. Length, 2 mm.

*Hab.*—New South Wales: Gosford (A. M. Lea).

A small dingy species, with median line of prothorax traceable from base to apex from some directions, but invisible from others. As on many others of the genus, parts of the derm appear minutely granulate through the clothing.

***Dryophilodes parvicollis*, n. sp.**

Dull reddish-brown; palpi paler. Moderately clothed with pale pubescence, denser on scutellum and on base of prothorax than elsewhere.

Eyes small but very prominent. Antennae rather long and thin. Prothorax not much wider than long, sides strongly rounded in middle, from some directions appearing angulate, hind angles obtuse; median line not traceable; punctures crowded and small, becoming minute at middle of apex. Elytra rather thin, conspicuously wider than widest part of prothorax; with crowded minute punctures, and in addition with close-set rows of fairly large ones, traceable to summit of apical slope, and on the sides to near apex. Length, 2.2-2.5 mm.

*Hab.*—Western Australia: Albany (Blackburn's collection and R. Helms), Geraldton (A. M. Lea); Queensland: Mount Tambourine (Lea).

In general appearance close to the preceding species, but prothorax smaller, sides, as viewed from behind, less acutely angulate, without a median line, antennae somewhat longer, and the small punctures of elytra less sharply defined. The Queensland specimen is slightly smaller, and has slightly larger eyes than the others, but there appears to be nothing to warrant its specific separation.

***Dryophilodes pallidus*, n. sp.**

Pale castaneous, upper surface feebly shining, under surface brighter. Clothed with short pale pubescence.

Eyes small and prominent. Antennae rather long and thin. Prothorax moderately transverse, sides, as viewed from behind, rather acute in middle, hind angles slightly more than 90 degs.; punctures crowded and minute. Elytra rather thin, distinctly wider than widest part of prothorax, parallel-sided to near apex; with dense and minute punctures, and in addition with larger seriate ones, fairly distinct on basal third, but, except on sides, not traceable to middle. Length, 1.5 mm.

*Hab.*—Western Australia: Geraldton (A. M. Lea).

An unusually small pale species.

ERNOBIUS MOLLIS, Linn., Syst. Nat., x., 1758, p. 355.

This species can now be recorded as Australian, as specimens have been taken in New South Wales (Sydney) and Tasmania (Launceston). Seven synonyms and varieties are noted in Pic's recent catalogue of the family.

**LASIODERMA SERRICORNE, Fab. Fig. 12.**

Two specimens received from Mr. W. W. Froggatt are labelled as having been taken "in wax of wild bee" at Derby (North-western Australia); they are decidedly above the average size of the species, but I can find no other distinguishing feature.

**Deroptilinus**, n. gen.

Head concealed from above. Eyes small, round, entire, latero-frontal. Antennae inserted in front of eyes, and slightly inwards, basal joint rather large, second to fourth, sixth and eighth, more or less triangular, eleventh clongate, the others each with a long ramus. Prothorax finely margined throughout, front portion granulate. Scutellum moderately large. Elytra slightly narrowed posteriorly, not quite covering the abdomen. Prosternum reduced to a minimum in front, with concealed cavities for the reception of antennae. Mesosternum concealed, except for a very short intercoxal process. Metasternum elongate, episterna wide. Abdomen with five distinct segments, the basal one deeply grooved on each side for the reception of hind legs. All legs capable of being received in depressions, the femora grooved for reception of tibiae, tarsi with four basal joints short, produced on lower surface, fifth about as long as two preceding ones combined.

Apparently nearer *Ptilinus* than any other genus, but prosternum different in front, elytra not completely covering the abdomen, two basal joints of tarsi much shorter and antennae different. The intervention of small joints between the fifth, seventh, and ninth is alike on the four specimens before me, but the rami vary in length, probably with sex; on *Ptilinus* the antennae are strongly serrated in the female. The head when removed from the body is seen to have a narrow neck, with a ridge or fine groove along its middle.

**Deroptilinus granicollis**, n. sp. Fig. 18.

Black; shoulders and tips of elytra and legs obscurely reddish, basal joints of antennae and tarsi paler. Densely clothed with very short ashen pubescence, somewhat variegated on elytra.

Head densely granulate-punctate or shagreened. Antennae with apical joint and rami of fifth, seventh, ninth, and tenth distinctly longer than first. Prothorax moderately transverse, front strongly rounded and about half the width of base; densely and finely granulate, but apical half, except on sides, more coarsely granulate. Elytra scarcely more than twice the length of prothorax; with rather feeble striae, becoming still more feeble posteriorly but rather deep on the sides near shoulders; interstices with dense and rather small asperate punctures, and much denser and very minute ones. Metasternum with dense asperate punctures, median line narrow and rather deep. Length, 3.75-4.25 mm.

*Hab.*—Tasmania (H. II. D. Griffith).

The rather coarse granules on the front of the prothorax are as in many species of *Bostrychidae* and *Scolytidae*. There are punctures in the elytral striae, but partly owing to the density of the general punctures, and partly to the pubescence, they are not sharply defined. The description is that of a male, a specimen that accompanied it, and is probably a female, has the elytra and abdomen of a dingy brown, the shoulders paler than the rest of the elytra, and its antennae with the rami of the fifth and tenth joints no longer than the first joint. A specimen from King Island has the extreme margins of elytra (but not the shoulders) paler than the adjacent parts; its antennae are as in the second specimen. One from northern Queensland has the elytra and femora scarcely paler than the adjoining parts; with the apical joint of antennae and the rami somewhat longer and darker than on the type. On the elytra of the type pale pubescence is conspicuous on the basal fourth, narrowly continued along the suture, and suddenly dilated to form a diamond-shaped patch about the summit of the apical slope, on the rest of the elytra the pubescence is brownish; on the second Tasmanian specimen the pale patches are traceable but less sharply defined; on the others the elytral clothing is almost uniformly brown.

***Trypopitys multimaculatus*, n. sp.**

Castaneous-brown or piceous-brown; antennae, palpi, and tarsi paler. Densely clothed with ashen and whitish pubescence, conspicuously maculate or mottled on upper surface.

Head rather small, punctures crowded but normally concealed. Eyes rather small but prominent. Antennae rather short, first joint rather large, second small, third and fourth still smaller, fifth to tenth larger and somewhat serrated, eleventh slightly larger than tenth. Prothorax slightly wider than long, strongly gibbous along middle, sides strongly produced downwards; with crowded partially concealed punctures. Elytra thin, parallel-sided to near apex; with regular rows of large punctures, becoming smaller posteriorly, interstices feebly separately convex, with small and minute punctures. Pectoral canal deep, connected with a narrow, deep, median line on posterior two-thirds of metasternum. Basal segment of abdomen about two-thirds the length of second, all with curved sutures. Legs thin and moderately long. Length, 4.6 mm.

*Hab.*—Tasmania (Aug. Simson), Launceston, Hobart; New South Wales: Forest Reefs (A. M. Lea).

The two shades of pubescence are irregularly intermingled on the pronotum, but on the elytra the paler kind forms numerous irregular spots, in places sometimes conjoined to form short oblique fasciae, the clothing on the scutellum is usually conspicuously whitish. On some specimens the elytral punctures are considerably larger than on others, being decidedly wider than the interstices on the basal half; such specimens are usually smaller and darker than the others, and are probably males.

This and the two following species have a deep and conspicuous notch at the median front of the metasternum, continuing the pectoral canal as in *Anobium*, but the three apical joints of the antennae do not form a large loosely-compacted club, and the ninth and tenth are practically the same as the preceding joints, the eleventh being only a little longer; hence they have been referred to *Trypopitys*, now first recorded as Australian. On each of them, on each side of the prothorax, there is a rather acute ridge that is directed obliquely downwards and forwards, but terminates half-way from the apex; it is more or less obscured by the clothing and legs, and is invisible from above.

***Trypopitys pictipennis*, n. sp.**

Castaneous-brown; most of elytra darker, antennae and palpi paler. Densely clothed with pale brown, or somewhat ochreous pubescence, irregularly mottled with black on elytra; on under surface becoming greyish-white.

Head with crowded but mostly concealed punctures. Eyes large and prominent. Antennae with first joint rather large, second and third small, fourth to tenth strongly serrated, eleventh slightly longer than tenth and first. Prothorax slightly wider than long, strongly gibbous in middle, sides strongly produced downwards, an acute prominence in each hind angle; punctures rather coarse and partially concealed. Elytra thin and parallel-sided to near apex; with regular rows of large deep punctures, becoming smaller (but still large) posteriorly. Basal segment of abdomen about half the length of the following one, all with curved sutures. Length, 4.75 mm.

*Hab.*—New South Wales: Dorrigo (W. Heron).

Rather close to the preceding species, but more brightly coloured, pectoral canal longer, eyes decidedly larger, and antennae more conspicuously serrated; of the latter the fourth to tenth joints are all distinctly triangular, the fourth is wider than long, the intervening joints gradually altering to the tenth, which is longer than wide; the pectoral canal is continuous from apex of prosternum

to apex of metasternum, but about the middle of the latter it is traversed by a narrow shining ridge, behind which it rapidly narrows to its end. On the basal third of elytra the pubescence is mostly black, on the apical two-thirds it irregularly covers about half of the derm.

***Trypopytis uniformis*, n. sp.**

Pale castaneous; antennae and palpi paler. Densely clothed with short, pale, depressed pubescence, interspersed with short sloping setae.

Head with crowded, partially concealed, punctures. Eyes prominent and of moderate size. Antennae with basal joint large, second and third small, fourth to tenth somewhat obtusely serrated, eleventh about once and one-half the length of tenth, and about the length of first, but distinctly thinner. Prothorax slightly wider than long, strongly gibbous in middle, irregularly depressed near base, sides strongly produced downwards; with crowded and rather small, partially concealed, punctures. Elytra thin and parallel-sided to near apex; with regular rows of rather large and deep punctures, becoming smaller posteriorly; interstices gently separately convex, but more strongly convex on sides; with crowded, small, and minute punctures. Abdomen large, basal segment as long as third and about one-third shorter than second, all with curved sutures. Legs thin but not very long. Length, 6 mm.

*Hab.*—Tasmania: Hobart (A. M. Lea).

In general appearance close to large specimens of *Anobium domesticum*, but with the antennae of *Trypopytis*. The uniformly coloured pubescence of the upper surface at once distinguishes from the two preceding species; the posterior end of the pectoral canal is also different, the canal is deep between the front and middle legs, but behind the latter it slopes at an angle of 45 degs., and is rather obscure on its sides, a narrow depression along its middle connects with a narrow, deep, median line on the apical half of the metasternum.

***Tasmanobium*, n. gen.**

Head concealed from above. Eyes rather large, prominent, and with small facets. Antennae serrated, non-clavate. Prothorax transverse, pronotum separated from each side of prosternum by an acute ridge. Scutellum distinct. Elytra narrow, parallel-sided, striation regular. Prosternum with a wide shallow groove in front for partial reception of head; flanks large, each produced to a point in front; metasternum elongate, side pieces large. Abdomen large. Legs rather long and thin, front coxae projecting and in contact, middle ones almost in contact, hind ones separated by a narrow intercoxal process; femora moderately grooved for reception of tibiae; basal joint of tarsi about as long as three following combined.

The three specimens of this genus before me in general appearance are strikingly close to *Anobium domesticum* and *Trypopytis uniformis*, but the absence of a pectoral canal, and the front coxae in contact, exclude it from both *Anobium* and *Trypopytis*; from the latter genus it is also excluded by the acute marginal ridges of the prothorax, and from the former also by the serrated antennae. By the table of Lacordaire it would be associated with *Trypopytis*, but in his diagnosis of that genus, as also of *Anobium*, the under surface (except of the head) is not even mentioned. By Leconte and Horn's table of the sub-group Anobia it would be associated with *Sitodrepa*, but in that genus each antenna has a large three-jointed club. In my table it is associated with *Secretipes*, with which it has little in common.



**Tasmanobium mimicum**, n. sp.

Pale castaneous; antennae and palpi paler. Moderately densely clothed with minute pale pubescence.

Head comparatively large; with dense minute punctures. Antennae with first joint moderately large, second small, third to tenth somewhat obtusely serrated, eleventh about once and one-half the length of tenth and first. Prothorax moderately transverse, rather strongly convex but not gibbous in middle, sides rather strongly rounded near base, which is twice the width of apex, a large and somewhat angular depression on each side of base, and a transverse one on each side of apex; punctures partially concealed but apparently larger than on head. Elytra thin, no wider than greatest width of prothorax; with rows of rather large punctures, becoming smaller posteriorly and larger on sides; interstices feebly convex and minutely punctate or shagreened. Metasternum with a narrow, deep, median line. Abdomen with basal segment in middle quite as long as second, the latter slightly longer than third or fifth, fourth slightly shorter than these, all with straight sutures. Length, 5-6 mm.

*Hab.*—Tasmania: Hobart, Strahan (A. M. Lea).

There is a longitudinal carina at the base of the head, but to see it clearly the head must be detached from the prothorax.

**Secretipes**, n. gen.

Head entirely concealed from above, its under surface transversely impressed between eyes. Mandibles short and stout, when at rest touching middle coxae. Eyes moderately large, lateral, and rather coarsely faceted. Antennae moderately long, eleven-jointed, basal joint stout, apical one slightly longer and thinner than tenth, the others somewhat serrated. Palpi small, apical joint securiform. Prothorax strongly convex, sides triangularly produced downwards and immarginate. Scutellum semicircular. Elytra with striae confined to sides. Prosternum and mesosternum very short and normally concealed; metasternum elongate, narrowly grooved along middle, middle of apex with two processes between hind coxae; side pieces narrow at base, subtriangular posteriorly. Abdomen with basal segment rather short but distinct from side to side, second as large as third and fourth combined, fifth about half as long again as fourth. Legs rather small, the front ones smallest of all, and normally entirely concealed, their coxae in contact; middle legs received in lateral cavities, their tarsi received in shallow grooves, which are continued behind a median process of the mesosternum; hind legs received in abdominal depressions, the coxae touching elytra, trochanters rather large.

This genus quite evidently belongs to the Xyletini, but appears to be excluded from *Xyletinus* itself, and from all other described genera of that group by the following characters in combination:—Front legs entirely concealed with head at rest; hind legs retractile into abdominal excavations; antennae serrated, the three apical joints neither greatly elongated nor clavate; elytral striae confined to sides. The species have the general appearance of those of *Deltocryptus*, the smaller ones of *Pronus*, and the more elongated ones of *Dorcatoma*; but all of these have a large three-jointed club. Owing to the intervention of the processes of the metasternum between the hind coxae the abdomen appears to be without an intercoxal process. Type of genus, *S. xanthorrhoeae*.

**Secretipes xanthorrhoeae**, n. sp. Figs. 19, 40.

Of a more or less dingy brown, parts of legs paler, antennae and palpi flavous. Densely clothed with minute pale pubescence.

Densely and minutely punctate all over. Elytra with two moderate striae on each side, curving around apex, but only one almost touching suture.

Metasternum with median line somewhat dilated in middle but shallow there. Length, 2.5-3.5 mm.

*Hab.*—South Australia: Parachilna (E. L. Savage), Port Lincoln, Adelaide (Rev. T. Blackburn), Mount Lofty Ranges, taken by means of sweep net (A. M. Lea), Kangaroo Island (J. G. Otto Tepper), Lucindale (B. A. Feuerherdt); Western Australia: Swan River, Donnybrook (Lea).

Some specimens have the upper surface almost castaneous-brown, on others it is mostly piceous-brown or even blackish, but with the sides obscurely paler; the metasternum is sometimes darker than the abdomen. Although only two striae are fairly distinct on each side, a third is faintly indicated in parts. Most of the specimens were taken from the dry flowering stems of species of *Xanthorrhoea*.

***Secretipes latericollis*, n. sp.**

Dark castaneous-brown or piceous-brown; antennae, palpi, and tarsi paler, metasternum usually slightly darker than abdomen. Densely clothed with minute pale pubescence.

With dense and minute punctures, but larger and more distinct on metasternum and flanks of prothorax than elsewhere. Length, 2.5-2.75 mm.

*Hab.*—Queensland: Dalby (Mrs. F. H. Hobler), Townsville; New South Wales: Tamworth, Forest Reefs (A. M. Lea).

In general appearance close to the preceding species, and with similar elytral striae, except that they are somewhat deeper, but metasternum and flanks of prothorax with decidedly coarser punctures, the antennae are thinner, the basal joint is smaller, and the second larger in proportion.

Seven specimens from northern Queensland (Blackburn's collection) probably belong to this species, but are somewhat smaller (2.2-2.5 mm.) and thinner, and another from Dalby is still smaller.

***Aulacanoibium*, n. gen.**

Head concealed from above, under surface deeply bisinuate for reception of antennae. Eyes moderately large and with rather large facets. Antennae with basal joint large, the following seven small, the three apical ones forming a large club, of which the first and second joints each have a long ramus (longer in male than in female). Prothorax transverse, sides triangularly produced downwards. Scutellum distinct. Elytra strongly striated. Prosternum with triangular vertical flanks. Mesosternum normally concealed. Metasternum with a deep median groove. Abdomen with five segments, but only the intercoxal process of the first visible. Legs rather short and received in cavities, the front pair thinner than the others, with their coxae pressed backwards and touching.

Although the type of this genus was described by Olliff as a *Dorcatoma*, its antennae are very different from those of that genus, and are received in two deep sinuations on the under surface of the head (much as in *Lasioderma serricorne*), the front coxae are in contact (instead of widely separated), and there is no cavity in the breast behind them, so that instead of belonging to the Dorcatomides it really belongs to Xyletinids, and should be placed near *Lasioderma*.

AULACANOBIUM LANIGERUM, Oll. (*Dorcatoma*). Figs. 13, 14, 20.

The type of this genus was evidently described from a contracted specimen; it is some years since I examined it, but there are now before me specimens that were compared and agreed with it. The antennae were originally described as "reddish-testaceous," but this only applies to the parts normally visible; the club is composed of three black joints, of which the first and second each have a long ramus (longer in the male than in the female). There are nine striae on

each elytron, and they are much stronger than on any other described Australian species of the subfamily. Two specimens were marked as taken from a fungus by Mr. W. W. Froggatt.

*Dicoelocephalus*, n. gen.

Head concealed from above, base of under surface deeply bisinuate and hollowed for reception of antennae. Eyes small. Antennae eleven-jointed, basal joint large, three apical ones forming a large loosely-compacted club. Prothorax bisinuate at base. Scutellum distinct. Elytra closely applied to prothorax, striate-punctate, or seriate-punctate. Prosternum with triangular flanks, base conjointly excavated with mesosternum on each side, for reception of front and middle legs; middle normally concealed by head; with an inner channel on each side for reception of side of head. Mesosternum concealed, except for intercoxal process. Metasternum deeply grooved in middle. Abdomen with first segment entirely concealed by hind legs, except for a small intercoxal process, the three following segments large, with their sutures bisinuate, the apical one longer. Legs received into excavations; front coxae pressed backwards, their tips in contact, middle coxae widely separated, the hind ones less widely separated but extending to the sides of abdomen, hind femora partly received in coxal grooves, each knee received in a notch on the side of an elytron, tibiae received in femora; tarsi short, hind and middle ones each received in a narrow groove near the trochanter.

With the head at rest the mandibles are in contact with the middle coxae, entirely concealing the front ones, so that, except for the more conspicuous rows of elytral punctures, there is nothing to distinguish the species from *Dorcatoma*; but on removing the head the front coxae are seen to be in contact, and there is no sternal cavity for the reception of the antennae, these being received in deep sinuations on the under surface of the head, much as on *Lasioderma serricorne*. From above the hind angles of the prothorax appear to be acute and to embrace the sides of elytra, but from the sides they are seen to be rounded off and to be more than right angles. The genus occurs also in New Zealand, as Mr. A. E. Brookes has an unnamed species of it from Okauia. Type of genus, *D. granipennis*.

*Dicoelocephalus granipennis*, n. sp. Figs. 21, 41.

Black, subopaque; parts of under surface and of legs obscurely paler; antennae reddish; with very short, depressed, pale pubescence.

Head with dense and small punctures; a thin curved carina from near each eye to clypeal suture, but not meeting there, a feeble median carina at base. Antennae with basal joint large, second small but longer than wide, third somewhat smaller, fourth to eighth transverse, first and second joints of club large, subequal, wider and shorter than apical joint. Prothorax twice as wide at base as at apex, sides finely margined; with small crowded punctures. Elytra with small punctures in shallow striae, both becoming deeper on sides, interstices with dense and minute granules, denser on shoulders than elsewhere. Metasternum with moderately large punctures, median line closed at mesosternum, but open posteriorly. Apical segment of abdomen twice as long as the subapical one. Length, 4.5-5.25 mm.

*Hab.*—Western Australia: King George's Sound (G. Masters), Donnybrook (A. M. Lea).

An oblong-elliptic, strongly convex species, the pale pubescence on the black background gives the upper surface a mouse-coloured appearance; in parts it is somewhat wavy. The head and prothorax from some directions appear densely and finely granulate, but on the upper surface the only true granules are on the elytra, there they are very small, but being somewhat shining they are very

distinct in certain lights. On several specimens a faint median line may be traced on the prothorax. From the side the notch on each elytron for the hind knee is very distinct, the notch for the middle knee is larger but less abrupt.

**Dicoelocephalus decipiens, n. sp.**

Of a dark dingy brown and somewhat shining; under surface of head and antennae, except basal joint, paler; with rather dense, depressed, ashen pubescence.

Head with dense and small but sharply defined punctures. Antennae with basal joint and three joints of club large, the intervening joints small. Prothorax with dense and small punctures. Elytra parallel-sided to near apex; densely and finely punctate or shagreened, striation distinct on sides, but somewhat obscure elsewhere. Prosternum with triangular flanks exposed; metasternum apparently divided into two median parts by the tarsal grooves of the middle legs, with a deep and rather wide median line, in parts densely punctate and opaque, elsewhere shining. Abdomen apparently composed of four segments, owing to the true basal one being concealed by the hind legs, except for a small intercoxal process. Length, 2.25 mm.

*Hab.*—New South Wales: Galston (A. M. Lea).

An oblong-elliptic species, much smaller than the preceding or the following ones but with the under surface of head deeply bisinuate, the lateral triangles of prosternum exposed and with similar abdomen and front legs. The middle parts of the sterna are evidently as in the following species, but the type being unique I have not dissected out the front and middle legs to examine the concealed parts. The elytral striae are traceable at regular intervals from suture to sides, but they appear as feeble undulations of a shagreened surface rather than defined lines containing distinct punctures; on the basal half of each side, however, there are three rather well-defined rows of rather large rugose punctures, the outer row beyond the middle appears more as a simple stria, and curves around the apex almost to touch the suture.

**DICOFLOCEPHALUS OBSCURUS, MacL. (*Cryptorhopalum*). Fig. 22.**

This species was referred to *Cryptorhopalum*, of the Dermestidae, with expressed doubts; it certainly belongs to the Anobiides, and probably to *Dicoelocephalus*, with the type species of which it agrees in all essential generic features, notably in the bisinuate under surface of head, in the antennae, and the abdomen. Some specimens before me were compared and agreed with the type, although they were not then dissected. It is considerably smaller than *D. granipennis*, somewhat narrower, seriate punctures of elytra less conspicuous, without granules, and metasternum different. When the sternae are clearly visible the middle of the mesosternum appears to be fairly long (about half the length of the metasternum) and rapidly narrowed to disappear between the front and middle legs, its hind margin being defined by the tarsal grooves, but this appearance is deceptive, as the part really belongs to the metasternum; when the head is removed the mesosternum is exposed, and its middle appears as a small process scarcely larger than the second joint of antennae. The rows of punctures on the sutural two-thirds of elytra are rather faint, but appear more distinct owing to the pubescence; on the sides they are distinct on the basal half, but posteriorly become faint, except that the outer row is curved around the apex so as almost to touch the suture.

*Hab.*—Queensland: Gayndah (type), Dalby, Cairns; New South Wales: Illawarra, Forest Reefs.

### *Deltocryptus*, n. gen.

Pronotum with sides produced downwards; prosternum normally entirely concealed, in the middle by the head, at the sides by the legs. Abdomen with basal segment concealed at sides by the legs, but with a fairly large triangular intercoxal process; sutures of the three following segments incurved to middle. Other characters as described in *Dicoelocephalus*.

This genus is certainly close to *Dicoelocephalus*, agreeing with it in the under surface of the head, antennae, concealed parts of legs, etc., but on that genus the pronotum is defined from the prosternum by an acute dividing line, between which and the front legs there is a well-defined triangle on each side; on the present genus the sides of the pronotum are brought downwards so that the dividing line between it and each side of the prosternum is in contact with the front legs, the triangle on each side being absent or rather entirely concealed; seen from each side there appears to be a triangular extension of the pronotum interposed between the front leg and eye for some distance, but for these to be in partial contact; on *Dicoelocephalus* the eye touches the exposed triangle of the prosternum, which completely separates it from the legs. Most of the species have the general appearance as of belonging to *Dorcatoma*, and unset specimens cannot readily be distinguished from that genus, but on detaching the head its under surface may be seen to be deeply bisinuate for the reception of the antennae (the head of at least one specimen of every species here described has been examined to make sure of this) and that the front coxae are in contact. Type of genus, *D. punctiventris*.

#### TABLE OF SPECIES OF DELTOCRYPTUS.

A. Abdomen with long pubescence partly obscuring its sutures .. ..	<i>ursus</i>
AA. Abdomen with sutures well defined.	
B. Sutural half of elytra without distinct rows of punctures.	
a. Under surface pale .. .. .	<i>inamoenus</i>
aa. Metasternum black .. .. .	<i>funereus</i>
BB. Sutural half of elytra with rows of large, or at least distinct punctures.	
C. Pubescence extremely short and inconspicuous .. ..	<i>xyleboroides</i>
CC. Pubescence mixed with longer hairs.	
D. Median line of metasternum wide .. ..	<i>aulacostethus</i>
DD. Median line of metasternum narrow in middle.	
E. Length, 2 mm. or more .. ..	<i>punctiventris</i>
EE. Length, 1½ mm. or less .. ..	<i>microscopicus</i>

#### NOTE ON TABLE.

The longer hairs are usually inconspicuous, especially on *D. aulacostethus*, unless the insect is viewed from the sides; but on *D. xyleboroides* the pubescence itself is so short as to be almost dust-like.

### *Deltocryptus punctiventris*, n. sp. Figs. 15, 23, 42.

Dark brown and slightly shining; under parts of head and antennae paler. Rather densely clothed with pale depressed pubescence, interspersed with numerous suberect hairs or setae.

Head with dense and small punctures. Antennae with basal joint and three joints of club large. Prothorax with punctures much as on head. Elytra with crowded and small punctures, and with regular rows of larger ones, becoming small posteriorly, the sides with rows of larger subquadrate punctures, the outer one curving around apex so as almost to touch the suture. Metasternum with crowded but sharply defined punctures, median line narrow and deep. Abdomen with dense punctures; basal segment distinct in middle and very narrowly traceable to sides. Length, 2-2.5 mm.

*Hab.*—Tasmania: Hobart (H. H. D. Griffith and A. M. Lea), Waratah, in moss (H. J. Carter and Lea), Launceston (Aug. Simson); Victoria: Dividing Range (Rev. T. Blackburn); New South Wales: National Park, in rotting leaves, Forest Reefs (Lea).

The hairs among the pubescence are more conspicuous on some specimens than on others. The head has a feeble median carina at the base, but it is sometimes concealed. On this, as on all others of the genus, the middle of the mesosternum is represented by a small (almost pointed) shining process, concealed with the head at rest, but distinct after it has been removed. On all of them the eyes are rather small.

***Deltocryptus ursus*, n. sp.**

Dark brown; antennae and tarsi paler. Densely clothed with rather long, depressed, pale pubescence, and with some suberect hairs scattered about.

Head with dense and small punctures. Antennae with basal joint and three joints of club large, apical joint almost as wide and distinctly longer than either of the preceding ones. Prothorax with punctures as on head, but less distinct on account of clothing. Elytra with dense and minute punctures, and with rows of larger ones, becoming conspicuous on sides. Metasternum with dense but rather sharp punctures; median line deep and narrow, but somewhat wider and open posteriorly. Length, 2.5 mm.

*Hab.*—Tasmania: Hobart (A. M. Lea).

An oblong-elliptic species structurally rather close to the preceding one, but more densely clothed; the pubescence is longer and more conspicuous than on all the others here described, and on the upper surface of the type it is somewhat waved, but this may be accidental; on the abdomen it is almost as long as on the upper surface, and obscures the sutures from most directions. The seriate punctures on the elytra are obscured by the clothing, so that it is difficult to trace a row throughout its length; but on each side there are three rows of larger ones that are rather conspicuous on the basal half, of these the outer one only curves around the apex so as almost to reach the suture. There is a concealed pectoral cavity, but it is for the reception of the tips of the mandibles, not for the antennae (as in *Dorcatoma*), these being received in the bisinuations on the under surface of the head; the front coxae (normally concealed) are also pressed backwards, with their tips touching.

***Deltocryptus aulacostethus*, n. sp.**

Blackish; head, elytra, and legs obscurely paler; tarsi and antennae much paler (almost flavous). With rather dense, depressed, ashen pubescence, interspersed with a few hairs.

Head with dense and small punctures. Basal joint of antennae and three joints of club large. Prothorax with punctures as on head, but less distinct on account of clothing. Elytra parallel-sided to near apex; with dense and small punctures, and with conspicuous rows of somewhat angular ones, becoming smaller posteriorly, but even there distinct. Under surface with dense and small punctures; median line of metasternum deep and wide. Length, 2 mm.

*Hab.*—New South Wales: Tamworth (A. M. Lea).

The seriate punctures on the sides of elytra are unusually large, so that they are distinctly wider than the interstices, even near the suture they are almost as wide as the interstices. With the head removed the median elevation of the mesosternum is quite conspicuous when viewed along the wide median line of the metasternum.

***Deltocryptus microscopicus*, n. sp.**

Dark brown and somewhat shining; antennae and tarsi paler, metasternum almost black. With short, depressed, and not very dense, ashen pubescence, interspersed with suberect hairs.

Head with dense and small but rather sharp punctures. Antennae with basal joint and three joints of club large. Prothorax with base almost straight; punctures much as on head. Elytra widest near base, nowhere parallel-sided, with dense and small punctures, and with rows of rather large angular punctures, becoming larger and rougher on sides. Under surface with dense and small but rather distinct punctures; median line of metasternum deep and narrow. Length, 1.1-1.25 mm.

*Hab.*—New South Wales: Sydney, National Park, in rotting leaves (A. M. Lea).

A minute, elliptic-ovate species, at first apparently belonging to *Dorcatoma*, but with under surface of head deeply bisinuate for the reception of antennae, front coxae in contact, and median process of mesosternum quite distinct from behind, when the head has been removed.

***Deltocryptus xyleboroides*, n. sp.**

Of a dingy castaneous-brown and subopaque, sutures of elytra and of metasternum narrowly infuscated; antennae flavous; with very short and inconspicuous pubescence.

Head with crowded and small punctures, with a thin median carina becoming acute posteriorly. Antennae with basal joint and three apical joints of club large. Prothorax scarcely one-fourth wider than long; densely and minutely punctate, middle of apical half minutely granulate. Elytra long and parallel-sided to near apex, surface shagreened or minutely punctate, with regular rows of rather large but shallow asperate punctures, becoming deeper on sides. Metasternum with dense but fairly sharp punctures; median line deep and narrow. Length, 2.75 mm.

*Hab.*—Queensland: Bundaberg (A. M. Lea).

An elongate parallel-sided species, in general appearance unlike the others here described, but with the under surface of head deeply bisinuate for the reception of antennae, front coxae in contact, and other generic details in conformity with them. Seen directly from above it has a striking resemblance to small Scolytidae of the genus *Xyleborus*.

***Deltocryptus inamoenus*, n. sp. Fig. 24.**

Castaneous, parts of prothorax and of elytra slightly infuscated, antennae flavous; with short, depressed, pale pubescence.

Head and prothorax with dense minute punctures. Antennae with basal joint and three joints of club large. Elytra with dense and minute punctures, with large seriate ones confined to sides. Metasternum more shining, slightly darker and with sparser punctures than abdomen, median line deep and narrow. Length, 2 mm.

*Hab.*—South Australia: Tarcoola (A. M. Lea).

On the type there is a large infuscation on the prothorax and elytra about the scutellum, but its outlines are not well defined and it may not be constant. The sutural half of each elytron is without traces of striation, but on each side there are three rows of somewhat angular punctures, of which the outer row changes to a stria and is curved around the apex so as almost to touch the suture.

***Deltocryptus funereus*, n. sp.**

Black or blackish, legs obscurely paler, antennae flavous; with short, depressed, pale pubescence.

Head with dense and small but fairly distinct punctures, becoming smaller on prothorax. Antennae with basal joint and three joints of club large, each joint, except the first and eleventh, acutely produced on one side. Elytra with dense and small punctures, with distinct rows on sides, but elsewhere without distinct ones. Metasternum more shining than abdomen, slightly darker, and with a rather wide median line. Length, 2 mm. (vix).

*Hab.*—South Australia: Barton (A. M. Lea).

Fairly close to the preceding species but much darker, metasternum with a wider median line and antennae different. In preparing an antenna for mounting in Canada balsam, the apical joint was lost, but it was of large size.

***Anobium areolicolle*, n. sp. Fig. 25.**

Of a dingy brown, under surface somewhat darker than upper, palpi and usually parts of the tarsi paler. Densely clothed with short brownish pubescence, partly depressed, and partly sloping.

Head with dense, small, and even granules. Eyes prominent but not very large. Antennae extending to hind coxae, basal joint large, second rather small, third to eighth still smaller and somewhat serrated, ninth about as long as the six preceding joints combined, slightly longer than tenth, and slightly shorter than eleventh. Prothorax moderately transverse, deeply notched on each side of base, each notch bounded in front by an acutely produced part of the side; with two large areoletts on each side, the first extending from the apex to one-third from the base and closed, the other latero-basal, smaller, and open externally; granules as on head but more obscured by clothing. Elytra parallel-sided to near apex; with rows of large quadrate punctures, the interstices moderately convex, about the width of the seriate punctures, and minutely granulate. Pectoral canal deep from apex of prothorax to basal third of metasternum, a narrow, deep, median line from thence to apex of the latter. Under surface with dense and small granules, basal segment of abdomen almost half the length of second. Length, 5-6 mm.

*Hab.*—Tasmania: Lakes district (Rev. T. Blackburn and Aug. Simson), Hobart (Commander J. J. Walker and A. M. Lea); Victoria: Dividing Range (Blackburn).

At first glance fairly close to *A. australiense* (*Hadrobregmus*), but prothorax less gibbous in middle, the notch on each side of the base much larger, the projection before each notch larger and more acute, and the eyes much smaller. The pubescence of the under surface and legs is somewhat paler than on the upper surface, and in some lights has a slightly golden gloss. The lateral areoletts of the prothorax are separated by an obtuse sinuous ridge. In the figure of the antennae the third to ninth joints (inclusive) are shown as rather longer than they should be.

***Anobium angustifuscum*, n. sp.**

Dark brown; antennae, palpi, and parts of legs paler. Clothed with rather short ashen pubescence.

Head with dense and minute punctures. Eyes prominent but not very large. Antennae with basal joint rather large, second much smaller, third to eighth much smaller, ninth slightly wider and slightly longer than tenth, and slightly wider and shorter than eleventh, the latter as long as second to eighth combined. Prothorax somewhat gibbous in middle near base, sides somewhat



triangularly produced downwards, front angles strongly concave, the hind ones less so; punctures dense and small. Elytra thin, parallel-sided to near apex; with rows of rather large, subquadrate, but shallow and asperate, punctures, becoming shallower posteriorly; interstices scarcely separately convex, except on sides, where the striation is moderately deep, with minute punctures. Basal segment of abdomen about half the length of the following one, all with curved sutures. Legs long and thin. Length, 3 mm.

*Hab.*—Tasmania (Rev. T. Blackburn).

A dark thin species. The front and middle coxae are conspicuously separated, but the intercoxal process of the mesosternum has an even slope, instead of being deeply concave, as in *A. domesticum* and closely allied species, and the median line of the metasternum is deep and wide on the posterior half, but absent from in front.

***Pronus subhumeralis*, n. sp. Fig. 26.**

Dull castaneous-brown, legs and antennae paler; metasternum black or blackish, abdomen sometimes almost as dark. With very short, depressed, pale, uniform pubescence.

Head with minute punctures. Antennae eleven-jointed, basal joint and three joints of club large. Prothorax with minute punctures; margins somewhat projecting. Elytra parallel-sided to near apex; with rather fine but distinct striae, becoming deeper and containing more distinct punctures on sides; interstices with punctures as on prothorax. Metasternum with median line narrow; punctures minute. Abdomen with basal segment along middle fully as long as second or fifth, three median ones with straight sutures. Length, 2.75-3.5 mm.

*Hab.*—Lord Howe Island (A. M. Lea).

With some doubts this species is referred to *Pronus*, from the described species of which it differs in being considerably smaller and with smaller eyes; and the elytra with shallower striae, except on the sides, where they are deeper. It has the general appearance of the more elongate species of *Dorcatoma*, but the antennae pass over, instead of between the front coxae; the middle coxae are distinctly separated, but the space between them is transversely excavated and open, in *Dorcatoma* the cavity between them is concealed; in this species also the basal segment of the abdomen is large, and the legs are not capable of being received in special depressions. The male is usually slightly smaller and darker than the female, and his abdomen is sometimes almost black; both sexes usually have a latero-basal infuscation on each elytron, but it is sometimes absent, and its borders are never sharply defined. Specimens were obtained in abundance by beating shrubs over an umbrella. A badly-damaged specimen probably belongs to the species, but is almost entirely black or blackish.

***Pronus marmoratus*, n. sp.**

Castaneous-brown or piceous-brown, sometimes almost black; antennae, palpi, and legs paler. Densely clothed with short ashen pubescence, darker in parts on elytra.

Head with dense minute punctures. Eyes small and prominent. Antennae with first joint and three joints of club large, second and third thin and moderately long, fourth to eighth shorter and feebly serrated. Prothorax with minute inconspicuous punctures. Elytra with punctures as on prothorax, but towards and on each side with fairly well-defined striae, of which one curves around the apex and almost extends to the suture. Metasternum with a narrow median line; punctures as on upper surface. Two basal segments of abdomen large, the three median ones with straight sutures. Length, 2.25-3 mm.

*Hab.*—Norfolk Island (A. M. Lea).

In general appearance close to *P. subhumeralis*, but elytra without striae on sutural half, and with somewhat variegated pubescence. The males are usually darker than the females (several pairs were taken *in cop.*), sometimes their body parts being entirely blackish; the females are sometimes of a rather bright castaneous; but usually the metasternum and abdomen are darker than the prothorax and elytra; on pale specimens the suture is narrowly blackish. On each elytron the pubescence has several dark patches: a round one near the base and suture, a transverse postmedian one obliquely narrowed posteriorly, and a small subapical one, the three being sometimes narrowly joined together; the markings are usually quite distinct from certain directions, especially in the males, but on the females they are sometimes indistinct, and on abrasion are obscured or disappear. Numerous specimens were obtained by beating foliage, four were taken from fungi, and one from rotting leaves.

#### CALYMMADERUS.<sup>(10)</sup>

This genus is closely allied to *Dorcatoma* and *Mirosternus*, but is distinct by the club of the antennae, the basal joint of which is large, oblong, and as long as the two apical ones combined, or somewhat longer, the two apical ones are closely approximated, so as sometimes to appear but one. The front coxae are widely separated, and there is a concealed sternal cavity, but when the head is removed a distinct median notch in the breast is exposed.

*Thaptor* was proposed by Gorham for some Central American species, and an Australian one was referred to it by Pic; but the genus was subsequently considered as synonymous with *Calymmaderus*.

The Australian species before me may be thus tabulated:—

A. Elytra without sharply impressed lateral striae .. .. .	<i>pulverulens</i>
AA. Elytra with one sharply defined stria on each side .. .. .	<i>unistriatus</i>
AAA. Elytra with two on each side.	
B. Shining and with very minute pubescence .. .. .	<i>incisus</i>
BB. Opaque and with longer, but still short, pubescence .. .. .	<i>inconspicuus</i>

#### *Calymmaderus pulverulens*, n. sp. Fig. 27.

Dark piceous-brown and shining, antennae and legs paler. Pubescence minute.

Head with dense and small punctures. Eyes large and with fairly large facets. Antennae with basal joint large, second and third moderately large, fourth to eighth small, ninth as long as seven preceding combined and longer than two following combined. Prothorax with minute punctures, becoming more distinct on sides. Elytra with small and minute punctures, striae feeble and lateral. Metasternum with a narrow median line, and with irregularly distributed punctures. Basal segment of abdomen distinct in middle, elsewhere almost concealed by the hind legs. Length, 3.3-25 mm.

*Hab.*—Norfolk Island (A. M. Lea).

An elongate-elliptic, strongly convex, shining species, with pubescence so extremely short that it causes the surface to appear dusty, rather than clothed. On the elytra the subbasal lateral swelling has larger punctures than elsewhere, although small; behind it two feeble striae commence, and are traceable almost to the suture, but they are nowhere sharply defined.

(10) Solier, in Gay, Hist. d. Chile, Zool., iv., p. 472; Lacord., Gen. des Col., iv., p. 526.

**Calymmaderus incisus, n. sp.**

Bright castaneous and shining. With minute pubescence.

Head less shining than elsewhere; with dense and minute punctures. Eyes rather large and with large facets. Antennae with basal joint large, second moderately large, third to eighth small, ninth large, oblong, almost as long as the two following combined. Prothorax and elytra with minute punctures, striae of the latter confined to the sides. Metasternum with a narrow and rather deep median line. Basal segment of abdomen distinct only in middle, where it appears as a curvilinear triangle. Length, 2.75 mm.

*Hab.*—Queensland: Brisbane (A. J. Coates).

A shining species approaching the preceding, but paler, and with two well-defined striae on each side of elytra; the striae are feeble near the base, but suddenly become deeper beyond the latero-basal swelling, they then curve around the apex, where the upper one terminates, the lower being continued almost to the suture. The sternal notch is continued to the base of the middle coxae.

**Calymmaderus inconspicuus, n. sp. Fig. 28.**

Of a dingy subopaque brown. Densely clothed with short, depressed, ashen pubescence.

Head with dense and minute punctures. Eyes rather large. Antennae with basal joint large, second moderately large; first joint of club thicker and slightly longer than two following combined. Prothorax and elytra with dense and small or minute punctures, the elytra with faint traces of discal striation, and with two deep striae on each side. Metasternum more shining and with larger punctures than elsewhere, a deep median line confined to posterior half. Basal segment of abdomen distinct only in middle. Length, 3 mm. (vix.).

*Hab.*—Lord Howe Island, unique (A. M. Lea).

An oblong-elliptic species, with the general outlines of *C. pulverulens*, but subopaque, and elytra with two sharply defined striae on each side, beginning quite close to the base, and both curving around the apex, but only the lower one almost touching the suture. The sternal notch is continued as a narrow triangle between the middle coxae.

**Calymmaderus unistriatus, n. sp.**

Piceous-brown and feebly shining; with very short, depressed, ashen pubescence.

Head with dense and minute punctures. Eyes rather large and with large facets. Antennae with basal joint large, second rather large, the next seven small, basal joint of club as long as the seven preceding joints combined, or the two apical ones combined. Prothorax with crowded minute punctures. Elytra with punctures as on prothorax, but in addition with faint rows of slightly larger ones, each side with one conspicuous stria. Metasternum with rather sharply defined punctures in front, median line narrow and deep on posterior half only. Basal segment of abdomen distinct in middle. Length, 4 mm.

*Hab.*—New South Wales: Illawarra (G. Compere).

An oblong-elliptic, dingy species, with the general outlines of *C. pulverulens*, but with a distinct stria on each side; there are faint traces of striation containing very feeble punctures on the disc of the elytra, and towards the sides the punctures and rows become more distinct; beyond the latero-basal swelling the outer row suddenly alters to a narrow stria, which is continued around the apex almost to touch the suture.

## CAENOCARA.

This genus is closely allied to *Dorcatoma*, of which it is sometimes regarded as a section; and, as in that genus, the front coxae of its species are widely separated, to allow the passage of part of the antennae into a concealed sternal cavity; in the male the basal joint of its club, however, has a produced part more than twice as long as its support.

The two Australian species here referred to the genus have the first joint of the club strongly produced to one side as in the European *C. bovistae*, and the abdomen (except as to its punctures) is somewhat similar, but the eyes are much larger.

***Caenocara insignicornis*, n. sp. Fig. 29.**

Pale castaneous and shining, suture of elytra and some marginal parts of sterna narrowly infuscated. Densely clothed with short, pale, semierect pubescence.

Head with minute punctures. Eyes large and with coarse facets. Antennae with basal joint and three joints of club large. Prothorax with minute punctures, more distinct on sides than in middle. Elytra with small punctures, striae confined to sides. Metasternum with a narrow median line. Abdomen composed of apparently four segments, the true basal one being almost entirely concealed by the hind legs. Length, 2.75 mm.

*Hab.*—Tasmania: Frankford (— Walken in Simson's collection).

The antennae are composed of eight joints, of which three form a club; the first of these has a produced part more than twice as long as its support, the second is strongly dilated to apex and incurved there, and the third is elongate-reniform. There are two striae on the side of each elytron, but they are faint on the basal third, then they suddenly become deep, and are so continued around the apical curve, when the upper one terminates, the lower one being continued so as almost to touch the suture.

This species is certainly congeneric with the New Zealand *Cyphanobium illustre*, Broun (which accordingly should be transferred to *Caenocara*), but differs from it in being somewhat larger, less densely clothed, the male (the only sex known to me) with somewhat smaller eyes, the second joint of club very different from the first, instead of similar, and the apical one shorter and stouter; the female of that species has antennae as on many species of *Dorcatoma*. Broun described the antennae as being composed of eleven joints, but he was probably deceived by the pubescence; under a compound power I can only see eight joints.

***Caenocara vigilans*, n. sp.**

Reddish-castaneous and shining, pronotum somewhat darker, elytra piceous-brown; with short, dense, suberect, whitish pubescence.

Head with small and sparse punctures. Eyes large, each slightly wider than the interocular space, and with rather large facets. Antennae with basal joint and three joints of club large. Prothorax with minute punctures. Elytra with dense and minute punctures; striae confined to sides. Abdomen apparently composed of but four segments, the basal one being almost entirely concealed. Length, 2 mm.

*Hab.*—Northern Queensland (Blackburn's collection).

Differs from the preceding species in being smaller, narrower, and darker, eyes larger, and basal joint of club with a longer process. In appearance it is strikingly close to *Dorcatoma antennalis*, and it has similar striation, but the eyes are larger, club considerably larger, with the produced part of its basal joint almost thrice as long as its support, hence the species was referred to *Caenocara* rather than to *Dorcatoma*. There are two deep striae on the side

of each elytron, commencing near the base, and terminated evenly almost at the suture. Only one antenna is left on the type, so it was not detached for examination under a compound power, and I was unable to count the joints between the large basal one and the club.

#### DORCATOMA.

Unset specimens of this genus have the head with the tips of the mandibles resting on the intercoxal process of the metasternum, entirely concealing the middle of the prosternum, mesosternum, and the front coxae, with the antennae and legs received in appropriate cavities, so as not to interrupt the continuity of outlines. When the head and prothorax are removed, it may be seen that a large cavity exists in the metasternum for the reception of the joints of the clubs, and that the mesosternum has been forced back, so as to appear as a vertical wall on each side, and to be quite concealed in the middle by the overlapping intercoxal process of the metasternum, much as in the Hawaiian genus *Mirosternus*, but they are without the deep and wide median line on the metasternum, characteristic of that genus; the front coxae are widely separated, so as to allow of the passage of part of the antennae to the concealed cavity. The eyes vary considerably in size, but their facets are usually large. They all have the basal joint of antennae large, and the three apical ones large (usually very large), and forming a loosely compacted club, of which the first and second joints are more or less triangular, the intervening joints are small and difficult to count. The abdomen of most species from the sides appears to be composed of four segments, with the sutures well defined, but the sutures often tend to obliteration, or at least to become indistinct in the middle; the true basal segment is normally concealed by the hind legs, except in the middle, where it appears as a small intercoxal process, and the extreme margins, which sometimes appear as narrow shining rims behind the coxae. They all have short, more or less uniform, pubescence or setae, usually erect or suberect, but occasionally depressed. The Australian species here referred to the genus may be roughly divided into two sections:—1. Those of a short, broad, "dumpy" form, usually with fine striae near the suture of elytra, as well as stronger ones on the sides, and those of rather more elongate but still compact form (as the European *D. chrysomelina* and *D. flavicornis*), with elytral striation usually confined to the sides, and basal segment of abdomen more distinct. The head of at least one specimen of every species, here described, has been detached from the body, so that the coxae and concealed parts of the sterna could be examined, as well as the under surface of the head itself; and an antenna of each was usually mounted in Canada balsam, for examination under the microscope. The tarsi are usually paler than the rest of the legs, but they are normally concealed.

Gorham<sup>(11)</sup> considered *Dorcatoma* contained forms with 11, 10, and 8 joints to the antennae, and that *Caenocara* was only a section of it. *D. lanigera*, Oll., is here commented upon as the type of a new genus, *Aulacnobium*.

#### TABLE OF AUSTRALIAN SPECIES OF *Dorcatoma*.

A. Head with a Y-shaped impression between eyes .. .. .	<i>interocularis</i>
AA. Head with two deep longitudinal grooves joining clypeal suture ..	<i>bisulciceps</i>
AAA. Head without special impressions behind clypeal suture.	
B. Elytra with rows of large punctures on sides near base.	
a. Punctures enclosed within the striae .. .. .	<i>norfolkensis</i>
aa. Punctures extending beyond the striae .. .. .	<i>punctilatera</i>
BB. Elytra without rows of large punctures on sides near base.	
C. First joint of club much wider than long.	
b. Almost circular; eyes rather small .. .. .	<i>subcircularis</i>
bb. Elliptic-ovate; eyes large .. .. .	<i>antennalis</i>

(11) Gorham, Biol. Cent. Amer., Coleoptera, iii., part 2, p. 208.

- CC. First joint of club longer than wide, or scarcely wider than long.
- D. Elytra without distinct lateral striae; club blackish.
- c. Pubescence wavy .. .. . *rhizobioides*
- cc. Pubescence not wavy .. .. . *elliptica*
- DD. Elytra with distinct lateral striae.
- E. Each elytron with one stria or none between the suture and lateral ones.
- d. Each side with three distinct striae .. .. . *atripennis*
- dd. Each side with less than three striae.
- e. Eyes large .. .. . *punctipennis*
- ee. Eyes small .. .. . *marginalis*
- EE. Each elytron with two striae between the suture and lateral ones.
- f. More than 2 mm. long .. .. . *modica*
- ff. Less than 2 mm. long .. .. . *minima*
- EEE. Each elytron with more than two striae between the suture and lateral ones.
- F. Elytra at basal third with striae at regular intervals from suture to sides.
- g. Eyes large; elytra castaneous .. .. . *irrasa*
- gg. Eyes small; elytra deep black .. .. . *aterrima*
- FF. Elytra with an interval between suture and each side where no striae are traceable.
- G. Conjoint width of eyes equal to or wider than interocular space.
- h. More than 2.5 mm. long .. .. . *macrops*
- hh. Less than 2.5 mm. long .. .. . *simulans*
- GG. Conjoint width of eyes less than width of interocular space.
- H. Less than 3 mm. long .. .. . *tasmaniensis*
- HH. Not less than 3 mm. long .. .. . *corticalis*

## NOTES ON TABLE.

E, EE, and EEE. The striae near the suture are usually faint, but are traceable in certain lights.

hh. On *D. simulans*, in some lights, very faint striation may be traced beyond the shoulders, but it is very feeble and invisible from most directions.

***Dorcatoma interocularis*, n. sp. Fig. 30.**

Dark piceous-brown, sterna almost black, antennae paler; with short, suberect, pale, setose pubescence.

Head finely granulate or shagreened, with a Y-shaped impression between eyes; clypeal suture deep, with two small impressions touching its hind edge. Antennae apparently ten-jointed, first joint large, second moderately large, the five following ones small, but two of them produced to one side; first joint of club large, produced on one side and rounded there, second subtriangular, third slightly longer and thinner. Prothorax with dense and small punctures. Elytra with similar punctures, with fine but distinct striae almost or quite disappearing posteriorly, except that on each side there is a conspicuous one from base to apex. Under surface with more distinct punctures than upper surface; metasternum with larger and sparser punctures than abdomen, and with a very narrow and faint median line. Length, 3 mm.

*Hab.*—New South Wales: Wollongong (A. M. Lea).

Very distinct from the other Australian species by the Y-shaped impression on the head, its three parts are narrowly impressed, but the Y itself is rather wide. The abdomen appears to be composed of but four segments, as only minute parts of the true basal one are visible. The legs of the type have not been removed from their cavities, but as the head has been detached the front coxae are seen to be widely separated. The eyes are of moderate size, and with rather large facets.

***Dorcatoma bisulciceps*, n. sp.**

Blackish, prothorax and abdomen obscurely paler, antennae obscurely reddish. Pubescence short and pale.

Head with two, deep, narrow grooves, close together from about half-way between eyes, to where they terminate in the deep clypeal suture. Antennae with basal joint and three joints of club large, the intervening ones small and apparently five in number. Prothorax with minute punctures. Elytra with fairly distinct punctures, with fine striae on disc almost disappearing posteriorly, each side with three well-defined striae towards base, but only one continuous to apex. Under surface as described in preceding species. Length, 3 mm.

*Hab.*—New South Wales (Blackburn's collection); Queensland: Mount Tambourine (A. M. Lea).

In appearance close to the preceding species, but slightly darker, elytra with lateral striae more distinct towards base, and head with two deep longitudinal grooves. The pubescence is semierect and appears to be easily abraded, as one specimen has most of the upper surface glabrous. Under a fairly high power of the microscope I can count only five joints between the large basal joint of antennae and the club, so that the antennae appear to be nine-jointed; it is probable, however, that they really have ten joints.

***Dorcatoma irrasa*, n. sp. Figs. 16, 17, 31.**

Castaneous. Uniformly clothed with short, semierect, setose pubescence.

Head with inconspicuous punctures. Eyes large, facets rather small. Antennae with basal joint and three joints of club large. Prothorax with small and rather dense punctures, larger on flanks than in middle. Elytra with dense and small punctures, striation fine but well defined, except on parts of apical slope, deeper on sides than elsewhere, but only one stria on each side traceable to apex. Metasternum with sparser and more sharply defined punctures than on upper surface; median line feeble. Abdomen apparently composed of four segments, the first being almost entirely concealed. Length, 2.75-3 mm.

*Hab.*—Western Australia: Donnybrook (A. M. Lea).

A comparatively large castaneous species, the elytra with distinct striation, except on parts of the apical slope, where, owing to the greater density of the punctures, they are indistinct or absent. Some specimens are slightly darker than others, and some have the legs and mandibles perceptibly darker than the sterna and abdomen. Under a hand lens the antennae appear to be composed of a large basal joint, two small following ones, and a club of three large joints; but under a compound power they are seen to be eleven-jointed.

***Dorcatoma corticalis*, n. sp.**

Blackish-brown, sterna black, club reddish. With uniform, short, semierect, ashen pubescence.

Head opaque and with crowded but rather sharply defined punctures. Eyes not very large, but with rather large facets. Antennae with basal joint large and a club of three large joints, the intervening joints small and seven in number. Prothorax with dense, partially concealed, punctures. Elytra with two deep striae on each side, one short, the other traceable to apex, elsewhere with fine striae, but disappearing about apical slope, where the punctures are denser than elsewhere. Metasternum with a narrow but well-defined median line. Length, 3-3.75 mm.

*Hab.*—South Australia: Adelaide, Pillaworta, under bark (Rev. T. Blackburn), Mount Lofty (S. H. Curnow, A. H. Elston, and J. G. O. Tepper); Tasmania: Launceston (Aug. Simson).

Structurally close to *D. irrasa*, but darker, with denser and somewhat larger punctures, head less shining, and with smaller eyes; as on that species the true basal segment of abdomen appears as a narrow shining rim behind the hind coxae. Under the microscope the antennae appear to be almost exactly as in fig. 31. At first glance the specimens appear to be entirely black, but on close examination the metasternum and legs are seen to be darker than the adjacent parts, the club is pale, but is normally concealed. For a short distance there are two deep striae on the side of each elytron, but only one is continuous. As viewed back downwards the sides and apex of abdomen appear to be enclosed by a double elytral margin, but one of these margins really consists of a narrow edging of the abdomen itself; a somewhat similar but less conspicuous double edging may be seen on other species.

***Dorcatoma macrops*, n. sp.**

Blackish, head and antennae paler. With short, more or less erect, ashen pubescence.

Head, antennae, and prothorax as described for *D. irrasa*. Elytra with more distinct punctures than on prothorax, striation well defined near suture, faint or absent about middle and about apical slope, each side with three deep striae near base, but only one of these traceable to apex. Metasternum with a well-defined but narrow median line. Length, 2.75 mm.

*Hab.*—New South Wales: Illawarra (G. Compere).

Structurally close to *D. irrasa* but darker, and smaller than the average size of that species, with the median line of metasternum more sharply defined; in colour it is nearer to *D. corticalis*, but the lateral striae more nearly resemble those of the first-named one. So far as the antennae could be examined under the microscope, without detaching them from the head, they appear to be composed of eleven joints, as in *D. irrasa*, but the first joint of the club is more pointed inwards (triangular) than on that species. Of the two specimens taken by Mr. Compere one has the metasternum and abdomen of the same shade of colour, on the other the metasternum is slightly the darker. A specimen from Queensland (Mount Tambourine, A. M. Lea) probably belongs to the species, but the elytral striae are somewhat fainter, and the abdomen and head are uniformly reddish.

***Dorcatoma tasmaniensis*, n. sp. Fig. 32.**

Deep black, prothorax obscurely diluted with red, head slightly paler, club of antennae still paler. With short, ashen, semiupright pubescence, sparser on elytra than elsewhere.

Head shining and with rather inconspicuous punctures; clypeal suture deep and moderately curved. Eyes comparatively small. Antennae with basal joint and three joints of club large, the intervening ones small. Prothorax with dense and small punctures. Elytra with slightly larger punctures than on prothorax, striation distinct in parts. Metasternum with median line very narrow but distinct. Length, 2.5 mm.

*Hab.*—Tasmania (Aug. Simson), Hobart, from fallen leaves, Latrobe, in flood debris, Mole Creek (A. M. Lea).

Structurally close to *D. macrops*, but smaller and somewhat wider in proportion, eyes distinctly smaller, median line of metasternum thinner and less deep, and abdominal sutures less distinct across middle. There are three fairly distinct striae and a feeble one (the latter sometimes absent) on each side of the suture from near the base to about the middle, when they disappear; on each side there are three well-defined ones, but only one of these extends to



the apex. There are probably eleven joints to the antennae, but I can only count six between the large basal joint and the club.

***Dorcatoma modica*, n. sp. Fig. 33.**

Dark castaneous-brown, head and antennae paler. With short suberect pubescence.

Head shining and with small punctures. Antennae with basal joint and three joints of club large. Eyes large and with rather large facets. Prothorax with minute punctures, becoming somewhat larger on sides. Elytra with small but rather sharply defined punctures, striation distinct near suture and on sides. Metasternum with median line very narrow, but slightly dilated at the ends. Length, 2.5 mm.

*Hab.*—Northern Queensland (Blackburn's collection), Cairns (E. Allen).

About the size of *D. tasmaniensis*, but less dark, with decidedly larger eyes and median line of metasternum different. Each elytron has two fairly distinct striae near the suture, of which the first terminates slightly beyond the middle, the second slightly before it, there are three deep striae on each side, but only one of these curves round so as almost to touch the suture. The antennae are probably eleven-jointed, but even under a fairly high power of the microscope I could not count the number of joints between the large basal one and the club.

A specimen from southern Queensland (Dalby, Mrs. F. H. Hobler) probably belongs to this species, but is smaller, 2.25 mm., rather less dark, and of the striae near the suture the first is feeble and the second is traceable with difficulty.

***Dorcatoma antennalis*, n. sp. Fig. 34.**

Black, head and abdomen obscurely reddish, antennae paler. With short, dense, suberect, pale pubescence.

Head shining and with minute punctures. Eyes large and with rather large facets. Antennae with basal joint, and three joints of club large. Prothorax with fairly distinct punctures on sides, but feeble elsewhere. Elytra with minute punctures, striae distinct only on sides. Median line of metasternum very narrow. Length, 2.25 mm.

*Hab.*—Queensland: Cairns (A. M. Lea).

At first glance apparently belonging to the preceding species, but distinct by the sides of elytra and antennae; each side has two deep striae commencing near the base, and curved round so as almost to touch the suture, and a shallower marginal one that connects with the sutural stria; the sutural one is distinct on the apical slope, elsewhere it is faintly traceable only in certain lights. The first joint of the club has a produced part almost twice the length of its support, and denoting an approach to *Caenocara*, the second is triangularly dilated to the apex, with the apex slightly incurved, and the apical joint longer but thinner than the others. I could not count the joints between the first and the club, but they are certainly more than four in number. The elytral pubescence from certain directions appears to be slightly lineate in arrangement.

A specimen from northern Queensland (Blackburn's collection) appears to belong to this species, but is smaller (2 mm.) and mostly castaneous, the elytra only being of a rather dark brown.

***Dorcatoma simulans*, n. sp.**

Dark brown, head and abdomen paler, antennae still paler. With dense, short, pale, suberect pubescence.

Head shining and with small punctures. Eyes large, with rather large facets. Antennae with basal joint and three joints of club large. Prothorax

with minute punctures, becoming larger and denser on sides. Elytra with rather sharply defined punctures, striation distinct near suture, feeble in middle, deep on sides. Median line of metasternum narrow. Length, 2.2-2.5 mm.

*Hab.*—Northern Territory: Darwin (W. K. Hunt).

In general appearance close to *D. modica* and with similar eyes and antennae, but elytral striae different; on each elytron there are two distinct striae near the suture (but vanishing on the apical slope), then some feeble ones, but sufficiently clear in certain lights, then three well-defined ones on the side; of these the first is short, the next extends to about level with the base of the subapical segment, and the third is deepened and curves around so as almost to touch the suture. From some directions the elytral pubescence appears distinctly lineate in arrangement. Two of the seven specimens before me have the elytra and metasternum almost black, another is almost entirely castaneous.

#### *Dorcatoma aterrima*, n. sp.

Deep shining black, antennae obscurely reddish.

Head with minute punctures. Eyes much smaller than usual. Antennae with basal joint and three joints of club large. Prothorax with minute punctures, becoming comparatively large on sides. Elytra with rather sparse but well-defined punctures on basal half, becoming crowded posteriorly; basal half with well-defined striae, becoming longer on sides, but only one traversing the densely punctate space so as almost to touch the suture. Metasternum with a narrow median line, and with distinct punctures, but much sparser than on abdomen. Length, 2.5 mm.

*Hab.*—New South Wales (Blackburn's collection).

The intensely black colour and the comparatively small eyes readily distinguish the present species from the others here referred to *Dorcatoma*, it appears to be nearest of all to *D. tasmaniensis*, but has smaller eyes and more distinct striation; the dense punctures on the posterior half of the elytra cause the surface to appear shagreened, and interrupt all the striae except a deep submarginal one. On the type there is a slight amount of pubescence on the sides of prothorax, on the shoulders and about the apex of abdomen, elsewhere the surface is shining and glabrous; but probably it has been much abraded, thus rendering the punctures and striae unusually distinct.

#### *Dorcatoma atripennis*, n. sp.

Black, prothorax, and abdomen obscurely paler, head and antennae slightly paler still. With short, suberect, ashen pubescence.

Head shining and with minute punctures. Eyes of moderate size and with rather large facets. Antennae with basal joint and three joints of club large. Prothorax with small punctures, but becoming larger on sides. Elytra with small and rather dense punctures, striation distinct only on sides. Length, 2 mm.

*Hab.*—Northern Queensland (Blackburn's collection).

At first glance apparently belonging to *D. antennalis*, but first joint of club and elytral striation very different. The second joint of the antennae is of moderate size, but between it and the club the articulation is indistinct; the first joint of the club is strongly rounded on its inner side, and not as wide as long, the second is subtriangular, and the third thinner (in preparing the antennae of the type for mounting in Canada balsam, the apical joint of each was lost). There is but one stria on each elytron near the suture, faint on the basal half, and not traceable elsewhere; on each side there are three distinct ones, of which the inner one is narrower and shorter than the others, the latter about the middle are conjoined to continue as a deep one, which curves around

the apex almost to the suture. The median line of the metasternum is wider than in any of the preceding species, it is fairly deep near the base, and becomes shallower and wider posteriorly; the abdominal sutures are very indistinct across the middle.

***Dorcatoma punctipennis*, n. sp. Fig. 35.**

Reddish-castaneous, metasternum darker, elytra still darker (mostly almost black). With short, dense, suberect, pale pubescence.

Head shining and with minute punctures. Eyes large and with rather large facets. Antennae with basal joint and three joints of club large. Prothorax with minute punctures, becoming larger and denser on sides. Elytra with rather dense and small but sharply defined punctures, striation confined to sides. Metasternum more convex and with somewhat denser punctures than usual in the middle, but sparser elsewhere; median line traceable only at ends. Length, 2 mm.

*Hab.*—Lord Howe Island (A. M. Lea).

Close to *D. modica*, and with very similar eyes, but basal joint of club more triangularly produced on one side, and each elytron with only one distinct stria. The first and second joints of the club are triangular, but the first is wider than long, the second longer than wide; under a fairly high power of the microscope I could only count four joints between the large basal joint of the antennae and the club. The distinct stria on each elytron is near the side, and begins level with the hind coxa, it then curves around so as almost to touch the suture, but between it and the outer margin a very faint one may be traced. A second specimen differs from the type in being decidedly smaller ( $1\frac{1}{2}$  mm.), somewhat paler, with the median line of metasternum faintly traceable in the middle, and the elytral punctures rather less sharply defined; it probably belongs to the species, but its antennae were not examined.

***Dorcatoma minima*, n. sp.**

Reddish-castaneous, elytra and metasternum slightly darker than elsewhere, club of antennae paler. With short, semierect, pale pubescence.

Head shining and with minute punctures. Eyes rather large and with large facets. Antennae with basal joint and three joints of club large. Prothorax with small punctures on sides, minute elsewhere. Elytra with dense and small punctures, striation faint except on sides. Median line of metasternum narrow but distinct. Length, 1.25 mm.

*Hab.*—Queensland: Dalby (Mrs. F. H. Hobler).

A minute species, smaller and somewhat narrower than any of the preceding ones. There are two short striae on each elytron near the suture, but they are very faintly indicated, and are invisible from several directions; there are three striae near each side, but of these two are rather feeble and short, only one being deep and curved around so as almost to reach the suture. I was unable to count the number of joints of antennae between the first and the club.

***Dorcatoma subcircularis*, n. sp. Fig. 36.**

Deep shining black, antennae reddish. With short, semierect, whitish pubescence.

Head with rather sparse and small punctures. Eyes not very large, facets rather small. Antennae with basal joint and three joints of club large. Prothorax with rather small but sharply defined punctures, becoming denser and

larger on sides. Elytra conjointly slightly wider than long; with rather sharply defined punctures, striae confined to sides. Metasternum rather strongly convex; with comparatively coarse punctures; median line scarcely indicated. Length, 1.25 mm.

*Hab.*—Northern Queensland (Blackburn's collection).

An unusually compact species ( $1.5 \times 1.25 \times 1$  mm.), readily distinguished by its almost circular outline, deep black colour, and by the triangular production of the basal joint of the club of antennae (the produced part being almost twice as long as its support) indicating an approach to *Caenocara*. Its antennae and striae are nearer those of *D. antennalis* than any other species, but it is conspicuously wider and darker. On the elytra there are no striae near the suture, but the punctures there have a faintly lineate appearance; on each side there are three deep striae, one of which is very short, the others curve around the apex, but one approaches more closely to the suture than the other. Under a fairly high power of the microscope I could not count more than five joints between the basal joint of antennae and the club.

### ***Dorcatoma punctilatera*, n. sp. Fig. 37.**

Dark piceous-brown, antennae and legs paler. With dense, short, suberect, ashen pubescence.

Head shining and with minute punctures. Eyes not very large but with rather large facets. Antennae with basal joint and three joints of club large. Prothorax with dense and minute punctures, scarcely larger on sides than in middle. Elytra with slightly larger punctures than on prothorax, and with more or less regular rows of slightly larger ones, becoming conspicuous on sides. Metasternum with median line narrow but distinct on apical half, not traceable towards base. Length, 2-3 mm.

*Hab.*—Lord Howe Island (A. M. Lea).

Some specimens are darker than others, their elytra and sterna being black or almost so, on many the head and abdomen are paler than the adjacent parts, but not as pale as the antennae and legs. At first the elytra appear to be faintly striated, with the striae deep on the sides, but this appearance is caused by rows of small punctures, with the interstices faintly undulated; on each side there are three conspicuous rows of punctures, of which the uppermost is short, the other rows consist of larger punctures, but posteriorly they become smaller, and one row really alters to a stria, which almost touches the suture. On the under surface of the head there are two rather small subfoveate impressions near the base (but not deeply bisinuate impressions, as in *Lasioderma* and allies); and the front coxae are widely separated, to allow the passage of the apical joints of antennae into the normally concealed sternal cavity. Numerous specimens were obtained by beating shrubs; one was taken from a tree-fern, and another from fallen leaves. Two small specimens are entirely bright castaneous, except that the antennae and parts of the legs are almost flavous; on one of them the seriate punctures on the elytra are also larger.

This and all the following species, regarded as of the second group, are more or less oblong-elliptic, with the elytra partly parallel-sided; on all the preceding species, regarded as of the first group, the shape is more elliptic-ovate, with the elytra bulging out where they join the prothorax; their abdominal sutures (unless otherwise noted) are clearly indicated in the middle. The legs appear to be capable of being received into cavities quite as deeply as in those species, but as seen they are usually partly free.

**Dorcatoma norfolcensis**, n. sp. or var.

Dark brown or blackish, antennae and parts of legs reddish. Length, 2.25-2.75 mm.

*Hab.*—Norfolk Island (A. M. Lea).

Nine specimens from Norfolk Island differ from specimens of the preceding species in having the rows of punctures on the elytra (except the lateral ones) scarcely, if at all, indicated; the punctures in the three outer rows are somewhat smaller than on that species, and those of the outermost row appear to be confined to a stria, and are not as wide as the interstice between two rows; on the preceding species the punctures in the basal half of the outer row extend beyond the limits of the stria, and are distinctly wider than the interstice between two rows. They are also slightly less robust and have somewhat larger eyes (in both sexes); but it is possible that they should be regarded as representing a varietal or subspecific form only.

**Dorcatoma rhizobioides**, n. sp. Fig. 38.

Black, parts of antennae and of legs reddish. Densely clothed with short, depressed, pale-ashen pubescence, somewhat waved on upper surface.

Eyes small and prominent. Antennae with basal joint and three joints of club large. Elytra faintly undulated. Metasternum with median line rather narrow but somewhat dilated in middle. Basal segment of abdomen rather short behind coxae, but distinct from side to side. Length 2.25-2.5 mm.

*Hab.*—Norfolk Island (A. M. Lea).

A narrow species with wavy pubescence (as on many small Coccinellidae); the sides of the elytra are faintly undulated but are non-striated. The punctures are concealed by the pubescence, but appear to be everywhere dense and very minute. The antennae are ten-jointed and dark, almost black, except that the small joints between the basal one and the club are almost flavous; the two basal joints of the club are triangularly dilated to, and incurved at, apex; on the male they are considerably larger than on the female. Seven specimens were obtained. It is smaller and darker than the New Zealand *D. oblonga*, but is close to it in many respects.

**Dorcatoma elliptica**, n. sp. Fig. 39.

Black, small joints of antennae and parts of legs reddish. With short, depressed, ashen pubescence.

Eyes small and prominent. Antennae with basal joint and three joints of club large. Elytra with faintly impressed rows of punctures on sides towards base, but disappearing posteriorly. Metasternum with median line distinct on posterior two-thirds, and narrowly impressed along its middle. Basal segment of abdomen rather short but distinct from side to side. Length, 2.5 mm.

*Hab.*—Lord Howe Island (A. M. Lea).

A narrow species, structurally close to *D. rhizobioides*, and with very similar antennae, but pubescence not at all waved, and faint punctures on sides of elytra, not becoming sharply impressed striae as on species of the first section of the genus; elsewhere the punctures are very minute and normally concealed by the clothing.

Twelve specimens from Tasmania, Kelso (Aug. Simson), Wilmot (H. J. Carter and A. M. Lea), Hobart, Ulverstone, and Marrawah (Lea) differ in being somewhat larger (up to 3 mm.), and with the punctures at sides of elytra even less distinct, two of them also have the elytra obscurely diluted with red (the margins rather more noticeably); but I can find no differences warranting their being considered as specifically distinct.

**Dorcatoma marginalis, n. sp.**

Piceous-brown, antennae and parts of legs paler. With short, suberect, ashen pubescence.

Head with dense and minute punctures. Eyes small and with rather large facets. Antennae with basal joint and three joints of club large, first joint of club slightly longer than its apical width and slightly larger than second. Prothorax with dense and minute punctures, becoming somewhat larger on sides. Elytra with dense and small punctures; striae confined to sides. Metasternum with median line very narrow but continuous from base to apex. Abdominal sutures scarcely traceable across middle. Length, 2.5 mm.

*Hab.*—Victoria: Alps (Rev. T. Blackburn).

The elytra are without the least evidence of striation near the suture; on each side near the base there are very feeble striae, but beginning level with the hind coxa there are two distinct ones, the upper short, the other deepened and continued around the apex so as almost to touch the suture. The first joint of the club not wider than long at once distinguishes the species from *D. antennalis* and *D. subcircularis*, whose lateral striae are also deeper and longer; *D. atripennis* is a smaller and darker species, with longer and stronger lateral striae; *D. punctipennis* is darker, with stronger elytral punctures and much larger eyes. On the type the head and abdomen are obscurely paler than the elytra and metasternum. I could not count the number of joints in the antennae between the large basal joint and the club.

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